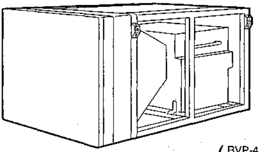
SERVICE MANUAL

MODEL	DEST.	CHASSIS NO.	MODEL	DEST.
RVP-411D	US Canadian	SCC-J62A-A	*PWB-411D*	US AEP Canadian
RVP-411DM	AEP	SCC-J97A-A	*PWK-411D*	US AEP Canadian
RVP-411DS	US Canadian	SCC-N53B-A	*RM-PJ10*	US AEP Canadian
RVP-411DMS	AEP	SSC-N55B-A	*VPS-411RF*	US AEP Canadian
RVP-511DS	US Canadian	SSC-N53A-A	*VPS-511RF*	US AEP Canadian
RVP-511DMS	AEP	SSC-N55A-A		
CHP-411D	US Canadian	SCC-J62B-A		
CHP-411DM	AEP	SCC-J97B-A		

REVISED-1



(RVP-411D
RVP-411DM)

RVP-411D/411DM	Projection Wall Unit
RVP-411DS/411DMS/511DS/511DMS	Projection Wall Screenless Unit
CHP-411D/411DM	Projection Wall Chassis
PWB-411D	Video Input Board
PWK-411D	System Control kit
RM-PJ10	Infrared Remote Control Receiver
VPS-411RF/511RF	Screen 1.7 mm

PROJECTION WALL SYSTEM

SONY®

⚠ WARNING

This manual is intended for qualified service personnel only.
To reduce the risk of electric shock, fire or injury, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so. Refer all servicing to qualified service personnel.

WARNING!!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS. THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

ATTENTION!!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÁSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE. LE CHÁSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ Á L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS Á LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET PAR UNE MAPQUE ⚠ SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIECES CONT D'UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÉCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY. LES RÉGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT SONT IDENTIFIES DANS LE PRÉSENT MANUEL. SUIVRE CES PROCÉDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONCTIONNEMENT EST SUSPECTÉ.

SAFETY CHECK-OUT
(US MODEL ONLY)

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
6. Check the line cords for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
7. Check the condition of the monopole antenna (if any). Make sure the end is not broken off, and has the plastic cap on it, Point out the danger of impalement on a broken antenna to the customer, and recommend the antenna's replacement.
8. Check the B+ and HV to see if they are specified values. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.
9. Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC Leakage. Check leakage as described below.

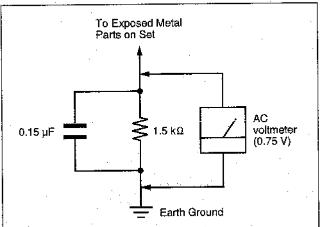


Fig. A. Using an AC voltmeter to check AC leakage.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers).

Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that are suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

HOW TO FIND A GOD EARTH GROUND

A cold-water pipe is guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth-ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe is not accessible, connect a 60 - 100 wattstrouble light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both sltos, if necessafy, to locate the hot side of the line, the lamp should light at normal brilliance if the screw is at ground potentioal. (See Fig. B)

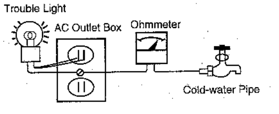


Fig. B. Checking for earth ground.

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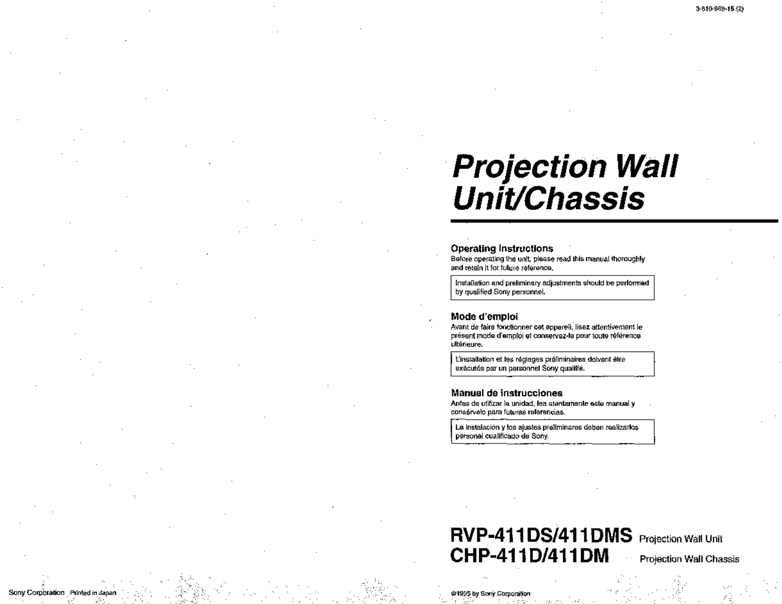
SECTION 1
OPERATING INSTRUCTIONS

This section is extracted from operation manual.

1-1. RVP-411DS/411DMS, CHP-411D/411DM, (RVP-411D/411DM) OPERATING INSTRUCTIONS

Including RVP-411D/411DM*



3-810-869-15 (2)

Projection Wall Unit/Chassis

Operating Instructions
Before operating the unit, please read this manual thoroughly and retain it for future reference.

Installation and preliminary adjustments should be performed by qualified Sony personnel.

Mode d'emploi
Avant de faire fonctionner cet appareil, lisez attentivement le présent mode d'emploi et conservez-le pour toute référence ultérieure.

L'installation et les réglages préliminaires doivent être exécutés par un personnel Sony qualifié.

Manual de instrucciones
Antes de utilizar la unidad, lea atentamente este manual y consérvelo para futuras referencias.

La instalación y los ajustes preliminares deben realizarlos personal cualificado de Sony.

RVP-411DS/411DMS Projection Wall Unit
CHP-411D/411DM Projection Wall Chassis

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Sony Corporation Printed in Japan

English

WARNING

Owner's Record

The model and serial numbers are located on the side. Record these numbers in the space provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. ________ Serial No. ________

For the Customers in the USA

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

For the Customers in Canada

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

For the Customers in the United Kingdom

WARNING
THIS APPARATUS MUST BE EARTHED

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

Green-and-yellow	:Earth
Blue	:Neutral
Brown	:Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The wire which is coloured green-and-yellow must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol ⏚ or coloured green or green-and-yellow. The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black. The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

Voor de klanten in Nederland

Bij dit produkt zijn batterijen geleverd.
Wanneer deze leeg zijn, moet u ze niet weggooien maar inleveren als KCA.

The socket-outlet should be installed near the equipment and be easily accessible.

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About this manual

This manual covers two types of models: RVP-411DS/411DMS and CHP-411D/411DM. The basic operations are the same but the following are different.

RVP-411DS/411DMS: Cabinet and chassis model without screen
Use the unit with the optional screen.
CHP-411D/411DM: Chassis model with chassis only

The RVP-411DS/411DMS with the optional VPS-411RF rear screen attached is used for the illustration purpose.
For details on installations and adjustments, please read the installation manual supplied with an optional System Control Kit.

* RVP-411D/411DM: Cube model with screen, cabinet and chassis

Precautions

On safety

- Operate the unit only on 120V AC (RVP-411DS, CHP-411D) or 220–240V AC (RVP-411DMS, CHP-411DM), 50/60Hz.
- Check that the operating voltage of your unit is identical with the voltage of your local power supply. If voltage adaptation is required, consult your Sony dealer or qualified personnel (RVP-411DMS, CHP-411DM).
- Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by qualified personnel before operating further.
- Unplug the unit from the wall outlet or set the POWER switch to OFF if it is not to be used for several days.
- To disconnect the cord, pull it out by the plug. Never pull the cord itself.

On installation

- Allow adequate air circulation to prevent internal heat build-up. Do not place the unit on surface (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes.
- Do not install the unit in a location near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust or humidity, mechanical vibration or shock.
- To avoid moisture condensation, do not install the unit in a location where the temperature may rise rapidly.

On illumination

- To obtain the best picture, the front of the screen should not be exposed directly to illumination or sunlight.
- Ceiling mounted spot lighting is recommended. Use a cover over fluorescent lamps to avoid lowering contrast ratio.
- Cover any window that face the screen with opaque draperies.
- It is desirable to install the projector in a room where floor and walls are not of light-reflecting material. If the floor and walls are of reflecting material, it is recommended that the carpet and wall paper be changed to a dark color.

On cleaning

- To keep the cabinet looking brand-new, periodically clean it with a soft cloth. Stubborn stains may be removed with a cloth lightly dampened with a mild detergent solution. Never use strong solvents, such as thinner or benzine, or abrasive cleansers, since these will damage the cabinet.
- Avoid touching the lens. To remove dust on the lens, use a soft dry cloth. Do not use a damp cloth, detergent solution, or thinner.

On repacking

Save the original shipping carton and packing material; they will come in handy if you ever have to ship your unit. For maximum protection, repack your unit as it was originally packed at the factory.

Features

About the Models RVP-411DS/411DMS and CHP-411D/411DM

RVP-411DS/411DMS

The RVP-411DS/411DMS is a projection wall unit to compose a projection wall system. Use the unit with the optional VPS-411RF (1.7 mm seam) or VPS-415RF rear screen (0.2 mm seam). The expected performance cannot be obtained if the unit is used with other screens.

CHP-411D/411DM

The CHP-411D/411DM is a product equivalent to the chassis of the RVP-411DS/411DMS and RVP-511DS/511DMS. The unit is designed for use with either a 41-inch or 50-inch screen.
When it is used with a 50-inch screen, however, certain readjustments such as registration adjustment are required. For a 50-inch screen, use either the optional VPS-511RF (1.7 mm seam) or VPS-515RF (0.2 mm seam) rear screen only.

Main Features

Point-scan input capability

The analog RGB signals (31.25 kHz/50 Hz, 31.25 kHz/100 Hz, 31.5 kHz/60 Hz, 31.5 kHz/120 Hz) can be input to the RGB IN connectors. When an optional video input board is used, the analog RGB signals (15.625 kHz/50Hz, 15.75 kHz/60 Hz) can be input.

Flicker-free

When an optional video input board is used, a high-quality picture without flicker can be obtained, since the analog 15K RGB, analog color difference and composite video signals with 50 Hz and 60 Hz vertical frequency are processed to field-doubled signals when input to the projector.

Narrow screen frame

If you use the optional VPS-411RF (1.7 mm seam) or VPS-415RF (0.2 mm seam) rear screen, obstruction of the display can be minimized when the projectors are stacked.

Light weight and short depth

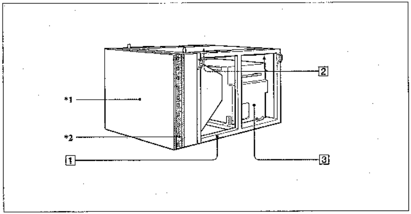
The projector can be handled easily thanks to its light weight and placed in compact spaces because of its short depth.

REMOTE connector to connect the RS-422 interface for interactive communication

The various controls can be operated with the connected computer. Linked connection of the several projectors can also be made by connecting them to REMOTE IN and OUT connectors.

Location and Function of Controls

Front



The illustration above shows the RVP-411DS/411DMS with the optional VPS-411RF screen attached.

1 Cabinet (RVP-411DS/411DMS only)

2 Screen lock knob (RVP-411DS/411DMS only)

3 Chassis

* RVP-411D/411DM

1 Cabinet

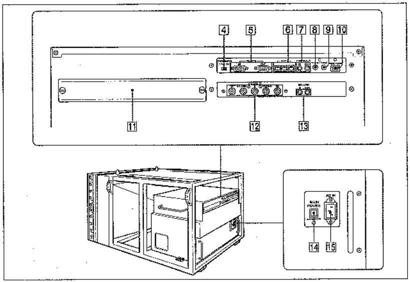
2 Screen lock knob

3 Chassis

***1 Screen**

***2 Screen holder**

Rear



4 TERMINATE switch
Sets to ON when the REMOTE IN connector is connected to the RS-422 interface and nothing is connected to the REMOTE OUT connector.

5 REMOTE IN/OUT connectors (D-sub 9-pin)
Connect the RS-422 interface for interactive communication with the external equipment.

6 INDEX NO. switches
When two or more projectors are connected, set the index number of each projector.

7 CONTROL S IN/OUT jacks (minijack)
Connect to the CONTROL S jacks of other Sony equipment. It is then possible to control the whole system with a single remote control unit.

8 STANDBY indicator
When MAIN POWER is on, the red indicator lights up indicating the unit is in standby mode. When the red indicator is lit, the projector can be turned on/off with the remote control unit (not supplied).

9 POWER indicator
Green indicator lights up when the power is turned on.

10 Error code indicator
When an operational error occurs, the error code is indicated. "00" indicates no error.

11 Optional video input board attachment part
Optional video input board can be attached.

12 31K RGB IN connectors (BNC connector)
Connect to the 31K RGB output connectors.

13 ABL LINK IN/OUT jacks (minijack)
Connect to the ABL LINK jacks on other projectors to activate the linked ABL function.

14 MAIN POWER switch

15 AC IN socket
Connect the supplied power cord.

Specifications

Optical characteristics

Projection system	3 picture tubes, 3 lenses, Horizontal inline system, Rear projection type
Picture tube	7-inch monochrome tubes, with coolant sealed (5.5-inch raster size)
Projection lens	F1.1/77mm
* Projected picture size	RVP-411DS/411DMS: 41 inches measured diagonally
* Luminance	RVP-411DS/411DMS with the VPS-411RF screen: ANSI (cd/m^2)[1] 280 cd/m^2 Peak 600 ft-L (2056 cd/m^2)
* Light output	ANSI lumen[1] 110 lm

Electrical characteristics

Input signal	Analog RGB signal When an optional PWB-411D video input board is attached: analog color difference signal, PAL, SECAM, NTSC and NTSC$_{4.43}$
Resolution	800 × 560 dots (RGB input at 31.25 kHz/50 Hz)
Frequency range	30 MHz, –3 dB
Input frequency	31.25 kHz/50 Hz/1:1, 31.25 kHz/100 Hz/2:1, 31.5 kHz/60 Hz/1:1, 31.5 kHz/120 Hz/2:1 (Horizontal frequency/Vertical frequency/Interlace ratio) allowance ±1% 15.625 kHz/50 Hz/2:1, 15.75 kHz/60 Hz/2:1 (when an optional PWB-411D video input board is used)
Test signal[2]	Cross hair/hatch (fine)/diagonal/circle/dot/H/ME/window/all white/black
Inputs	RGB signal R, G, B: 0.7Vp-p±2dB, 75 ohms terminated G signal with sync input: 1.0Vp-p±2dB, 75 ohms terminated, sync negative HD, VD: 1.0–4.0Vp-p, 75 ohms terminated, positive/negative SYNC: composit sync input, 1.0–4.0Vp-p, 75 ohms terminated, positive/negative Y, R-Y, B-Y signal (when an optional video input board is attached) Y: 1.0Vp-p±2dB, 75 ohms terminated, sync negative R-Y, B-Y: 0.7Vp-p±2dB, 75 ohms terminated Video signal (when an optional video input board is attached) Composite video input: BNC connector, 1.0Vp-p±2dB, 75 ohms terminated, sync negative Y: BNC connector, 1.0Vp-p±2dB, 75 ohms terminated, sync negative C: BNC connector, burst level, 0.286Vp-p±2dB, 75 ohms terminated (NTSC) 0.3Vp-p±2dB, 75 ohms terminated (PAL) REMOTE IN: D-sub 9-pin connector (See "Signal assignment" on page 9 (E).) CONTROL S IN: minijack ABL LINK IN: minijack
Outputs	REMOTE OUT: D-sub 9-pin connector (See "Signal assignment" on page 9 (E).) CONTROL S OUT: minijack ABL LINK OUT: minijack

General

* Power requirements	RVP-411DS, CHP-411D: 120V AC, 50/60 Hz RVP-411DMS, CHP-411DM: 220 – 240V AC, 50/60 Hz
* Power consumption	RVP-411DS, CHP-411D: 300 W, 2.8 A RVP-411DMS, CHP-411DM: 300 W, 1.4 A
Operating temperature	5°C to 40°C
Operating humidity	30% to 85% (free of condensation)
* Dimensions	RVP-411DS/411DMS: Approx. 830 × 641 × 1044 mm (w/h/d) ($32 \frac{3}{4} \times 25 \frac{1}{4} \times 41 \frac{1}{8}$ inches) CHP-411D/411DM: Approx. 687 × 469 × 465 mm (w/h/d) ($27 \frac{1}{8} \times 18 \frac{1}{2} \times 18 \frac{3}{8}$ inches)
* Mass	RVP-411DS/411DMS: Approx. 75 kg (165 lb 6 oz) CHP-411D/411DM: Approx: 47 kg (103 lb 10 oz)
Accessories supplied	Power cord (1) SIRCS cord (1) Operating Instructions (1) Brackets (2) (CHP-411D/411DM only) Screws (4) (CHP-411D/411DM only)

Design and specifications are subject to change without notice.

* RVP-411D/411DM:

Projected picture size	41 inches measured diagonally
Screen	Black stripe, 0.78 mm pitch
Luminance	ANSI (cd/m^2)[1] 260 cd/m^2 Peak 600 ft-L (2056 cd/m^2)
Light output	ANSI lumen[1]
Power requirements	RVP-411D:120 V AC, 50/60 Hz RVP-411DM:220 - 240 V AC, 50/60 Hz
Power consumption	RVP-411D:300 W, 2.8 A RVP-411DM:300 W, 1.4 A
Dimensions	Approx. 836 ×641 ×1022 mm (w/h/d) ($33 \times 25 \frac{1}{4} \times 40 \frac{1}{4}$ inches) Screen frame 1.8 mm ($\frac{3}{32}$ inches)
Mass	Approx. 82 kg (180 lb 12 oz)

Optional accessories

Rear screen
- VPS-411R (diffuser panels L and F without frame)
- VPS-411RF (with frame, 1.7 mm seam)
- VPS-415RF (with frame, 0.2 mm seam)

System control kit PWK-411D (including the remote control unit RM-PJ1292)

Base stand PWR-B411A

Dual position beam PWR-P412A

Triple position beam PWR-P413A

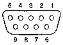
Video input board PWB-411D

Remote control receiver RM-PJ10

RS-422 connecting cable RCC-1W (1 m)/RCC-1W2 (1.2 m)

Signal assignment

REMOTE IN/OUT connector (D-sub 9-pin)



Pin No.	Signal	Input/Output
1	Frame Ground	–
2	Transmit (–)	Output
3	Receive (+)	Input
4	Receive Common	–
5	N.C.	–
6	Transmit Common	–
7	Transmit (+)	Output
8	Receive (–)	Input
9	Frame Ground	–

RS-422 format

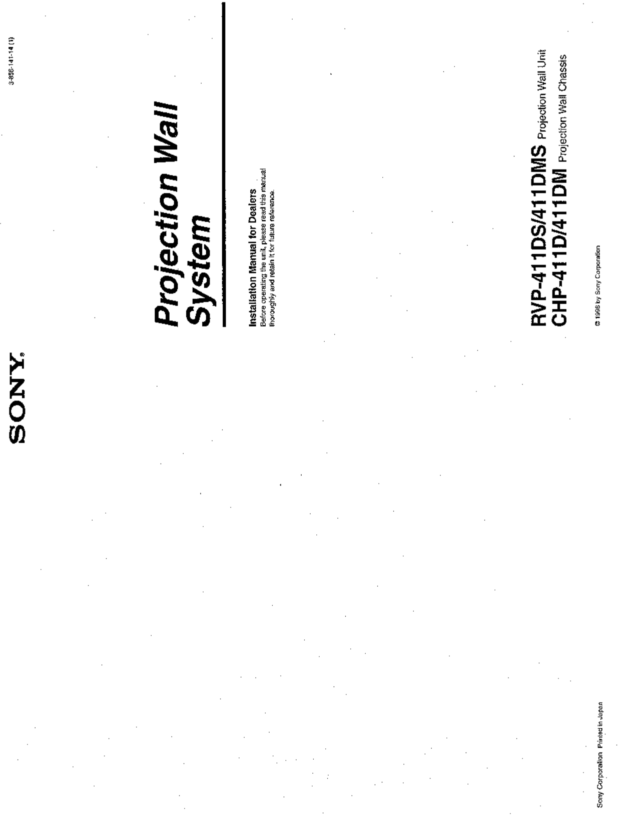
---

[1] ANSI lumen and cd/m^2 are measuring methods of American National Standard IT 7.215.

[2] Inputting the 15 kHz sequential scanning signal may affect the test signal.

1-2. RVP-411DS/411DMS, CHP-411D/411DM, (RVP-411D/411DM) INSTALLATION MANUAL FOR DEALERS

Including RVP-411D/411DM*



3-856-141-14 (1)

SONY

Projection Wall System

Installation Manual for Dealers
Before operating the unit, please read this manual thoroughly and retain it for future reference.

RVP-411DS/411DMS Projection Wall Unit
CHP-411D/411DM Projection Wall Chassis

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Sony Corporation Printed in Japan

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About This Manual

This manual covers two types of models: RVP-411DS/411DMS and CHP-411D/411DM. The basic operations are the same but the following are different.

RVP-411DS/411DMS: Cabinet and chassis model without screen
Use the unit with the optional screen.
CHP-411D/411DM: Chassis model with chassis only

The RVP-411DS/411DMS with the optional VPS-411RF rear screen attached is used for the illustration purpose.
"Projector" is used in this manual as a general term for the above two models and the models with screen.

* RVP-411D/411DM: Cube model with screen,
cabinet and chassis

Features

About the Models RVP-411DS/411DMS and CHP-411D/411DM

RVP-411DS/411DMS

The RVP-411DS/411DMS is a projection wall unit to compose a projection wall system. Use the unit with the optional VPS-411RF (1.7 mm seam) or VPS-415RF (0.2 mm seam) rear screen. The expected performance cannot be obtained if the unit is used with other screens.

CHP-411D/411DM

The CHP-411D/411DM is a product equivalent to the chassis of the RVP-411DS/411DMS and RVP-511DS/511DMS. The unit is designed for use with either a 41-inch or 50-inch screen.
When it is used with a 50-inch screen, however, certain readjustments such as registration adjustment are required. For a 50-inch screen, use either the optional VPS-511RF (1.7 mm seam) or VPS-515RF (0.2 mm seam) rear screen only.

Main Features

Composite video and analog color difference signals acceptable

The projector can project a variety of input sources when the optional PWB-411D video input board is used, as it accepts the composite video signals (NTSC, PAL, SECAM and NTSC$_{4.43}$), analog color difference signal and 15K analog RGB signal.

Point-scan input capability

The analog RGB signals (31.25 kHz/50 Hz, 31.25 kHz/100 Hz, 31.5 kHz/60 Hz, 31.5 kHz/120 Hz) can be input to the RGB IN connectors on the projector.
When an optional video input board is used, the analog RGB signals (15.625 kHz/50 Hz, 15.75 kHz/60 Hz) can be input.

Flicker-free

When an optional video input board is used, a high-quality picture without flicker can be obtained, since the analog 15K RGB, analog color difference and composite video signals with 50 Hz and 60 Hz vertical frequency are processed to field-doubled signals when input to the projector.

Narrow screen frame

If you use the optional VPS-411RF (1.7 mm seam) or VPS-415RF (0.2 mm seam) rear screen, obstruction of the display can be minimized when the projectors are stacked.

Light weight and short depth

The projector can be handled easily thanks to its light weight and placed in compact spaces because of its short depth.

REMOTE connector to connect the RS-422 interface for interactive communication

The various controls can be operated with the connected computer. Linked connection of the several projectors can also be made by connecting them to REMOTE IN and OUT connectors.

Newly developed registration adjustment

A newly developed procedure enables you to adjust registration precisely, rapidly and simply.

Features

Linked automatic brightness limiter

The Linked ABL function that can be activated by using the optional linked ABL cable synchronizes the brightness limiting point among the connected projectors.

Skeletal structure

The projector has a skeletal structure that provides adequate air circulation and prevents internal heat build-up inside the projector. This structure facilitates transportation and stacking of the projectors using a forklift.

Multiple memories for the adjusted data

The adjusted registration data can be stored in eight different memories. This allows the input signals of different frequencies to be adjusted precisely. The adjusted data for size, shift, blanking, etc. are stored for each input signal.

Three-digit index number

You can address each projector with a three-digit index number. You can also address a group of projectors to control them together.

Wired or wireless remote control

You can control all adjustments remotely with the RM-PJ1292 remote control unit (supplied with the PWK-411D system control kit) connected to the projector. You can control multiple projectors with a single remote control, separately or simultaneously. You can also use the optional RM-PJ10 remote control receiver as a wireless remote control.

Free layout/easy jointing

The cube style projection wall units provide a variety of projection-wall displays, e.g. four (2 × 2) or nine (3 × 3) screens, several units lined up horizontally or vertically.
You can joint the projectors simply by tightening the screws.

Easy maintenance

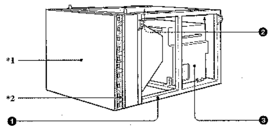
The projector screen can be removed from the front of the projector for easy maintenance.

Stacking up to five projectors vertically (up to 10 projectors with reinforcement)

The projector is designed to be loaded with up to five projectors. You can stack six to ten projectors if you reinforce them.

Location and Function of Controls

Front



The illustration above shows the RVP-411DS/411DMS with the optional VPS-411RF screen attached.

❶ **Cabinet (RVP-411DS/411DMS only)**

❷ **Screen lock knob (RVP-411DS/411DMS only)**

❸ **Chassis**

* RVP-411D/411DM

❶ **Cabinet**

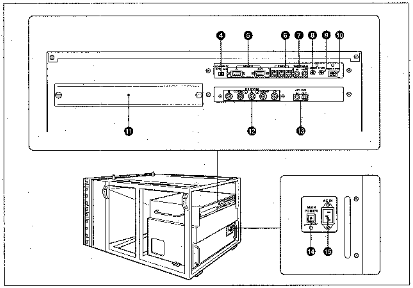
❷ **Screen lock knob**

❸ **Chassis**

*1 **Screen**

*2 **Screen holder**

Rear



④ TERMINATE switch
Sets to ON when the REMOTE IN connector is connected to the RS-422 interface and nothing is connected to the REMOTE OUT connector.

⑤ REMOTE IN/OUT connectors (D-sub 9-pin)
Connect the RS-422 interface for interactive communication with the external equipment.

⑥ INDEX NO. switches
When two or more projectors are connected, set the index number of each projector.

⑦ CONTROL S IN/OUT jacks (minijack)
Connect to the CONTROL S jacks of other Sony equipment. It is then possible to control the whole system with a single Remote Commander.

⑧ STANDBY indicator
When MAIN POWER is on, the red indicator lights up indicating the unit is in standby mode. When the red indicator is lit, the projector can be turned on/off with the remote control unit (not supplied).

⑨ POWER indicator
Green indicator lights up when the power is turned on.

⑩ Error code indicator
When an operational error occurs, the error code is indicated. "00" indicates no error.

⑪ Optional video input board attachment part
Optional video input board can be attached.

⑫ 31K RGB IN connectors (BNC connector)
Connect to the 31K RGB output connectors.

⑬ ABL LINK IN/OUT jacks (minijack)
Connect to the ABL LINK jacks on other projectors to activate the linked ABL function.

⑭ MAIN POWER switch

⑮ AC IN socket
Connect the supplied power cord.

Specifications

Optical characteristics

Projection system	3 picture tubes, 3 lenses, Horizontal inline system, rear projection type
Picture tube	7-inch (5.5-inch raster size) monochrome tubes, with coolant sealed
Projection lens	F1.1/77 mm
* Projected picture size	RVP-411DS/411DMS: 41 inches measured diagonally
* Luminance	RVP-411DS/411DMS with the VPS-411RF screen: ANSI (cd/m²) 1) 280 cd/m² Peak 600 ft-L (2056 cd/m²)
* Light output	ANSI lumen 1) 110 lm

Electrical characteristics

Color system	Analog RGB signal When the optional PWB-411D video input board is used: analog color difference signal, PAL, SECAM, NTSC and NTSC4.43
Resolution	800 × 560 dots (RGB input at 31.25 kHz/50 Hz)
Frequency range	30 MHz, –3 dB
Input frequency	31.25kHz/50Hz/1:1, 31.25kHz/100Hz/2:1, 31.5kHz/60Hz/1:1, 31.5kHz/120Hz/2:1 (Horizontal frequency/vertical frequency/interlace ratio) allowance: ±1 % 15.625kHz/50Hz/2:1, 15.75kHz/60Hz/2:1 (when the optional PWB-411D video input board is used)
Test signal 2)	Cross hair/hatch (fine)/diagonal/circle/dot/H pattern/ME/window/all white/black

* RVP-411D/411DM:

Projected picture size	41 inches measured diagonally
Screen	Black stripe, 0.78 mm pitch
Luminance	ANSI (cd/m²)1) 260 cd/m² Peak 600 ft-L (2056 cd/m²)
Light output	ANSI lumen1)

Inputs

RGB signal

R, G, B: 0.7Vp-p±2dB, 75 ohms terminated
Sync on G signal: 1.0Vp-p±2dB, 75 ohms terminated, sync negative
HD, VD: 1.0–4.0Vp-p, 75 ohms terminated, positive/negative
SYNC: composite sync,1.0–4.0 Vp-p, 75 ohms terminated, positive/negative

Y, R-Y, B-Y signal (when an optional video input board is attached)

Y: 1.0Vp-p±2dB, 75 ohms terminated, sync negative
R-Y, B-Y: 0.7Vp-p±2dB, 75 ohms terminated

Video signal (when an optional video input board is attached)

Composite video: BNC connector, 1.0Vp-p±2dB, 75 ohms terminated, sync negative
Y: BNC connector, 1.0Vp-p±2dB, 75 ohms terminated, sync negative
C: BNC connector, burst level. 0.286Vp-p±2dB, 75 ohms terminated (NTSC)
0.3Vp-p±2dB, 75 ohms terminated (PAL)
REMOTE IN: D-sub 9-pin connector (See "Signal assignment" on page 3-2.)
CONTROL S IN: minijack
ABL LINK IN: minijack

Outputs

REMOTE OUT: D-sub 9-pin connector (See "Signal assignment" on page 3-2.)
CONTROL S OUT: minijack
ABL LINK OUT: minijack

---

1) ANSI lumen and cd/m² are measuring methods of American National Standard IT 7.215.
2) Inputting the 15 kHz sequential scanning signal may affect the test signal.

Specifications

General

* Power requirements
  RVP-411DS, CHP-411D:
    120 V AC, 50/60 Hz
  RVP-411DMS, CHP-411DM:
    220–240 V AC, 50/60 Hz
* Power consumption
  RVP-411DS, CHP-411D:
    300 W, 2.8 A
  RVP-411DMS, CHP-411DM:
    300 W, 1.4 A
Operating temperature
    5°C–40°C
Operating humidity
    30%–85% (free of condensation)

* Dimensions	RVP-411DS/411DMS: Approx. 830 × 641 × 1044 mm (w/h/d) (32 $^3/_4$ × 25 $^1/_4$ × 41 $^1/_8$ inches) CHP-411D/411DM: Approx. 687 × 469 × 465 mm (w/h/d) (27 $^1/_8$ × 18 $^1/_2$ × 18 $^3/_8$ inches)
* Mass	RVP-411DS/411DMS: Approx. 75 kg (165 lb 6 oz) CHP-411D/411DM: Approx. 47 kg (103 lb 10 oz)

Accessories supplied
  Power cord (1)
  SIRCS cord (1)
  Brackets (2) (CHP-411D/411DM only)
  Screws (4) (CHP-411D/411DM only)

Design and specifications are subject to change without notice.

* RVP-411D/411DM:

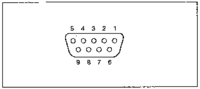
Power requirements	RVP-411D:120 V AC, 50/60 Hz RVP-411DM:220 - 240 V AC, 50/60 Hz
Power consumption	RVP-411D:300 W, 2.8 A RVP-411DM:300 W, 1.4 A
Dimensions	Approx. 836 × 641 × 1022 mm (w/h/d) (33 × 25 $^1/_4$ × 40 $^1/_4$ inches) Screen frame 1.8 mm ($^3/_{32}$ inches)
Mass	Approx. 82 kg (180 lb 12 oz)

Optional accessories

Rear screen
  VPS-411R (diffuser panels L and F without frame)
  VPS-411RF (with frame, 1.7 mm seam)
  VPS-415RF (with frame, 0.2 mm seam)
System control kit PWK-411D (including the remote control unit RM-PJ1292)
Base stand PWR-B411A
Dual position beam PWR-P412A
Triple position beam PWR-P413A
Video input board PWB-411D
Remote control receiver RM-PJ10
RS-422 connecting cable RCC-1W (1 m)/RCC-1W2 (1.2 m)

Signal assignment

REMOTE IN/OUT connector (D-sub 9-pin)

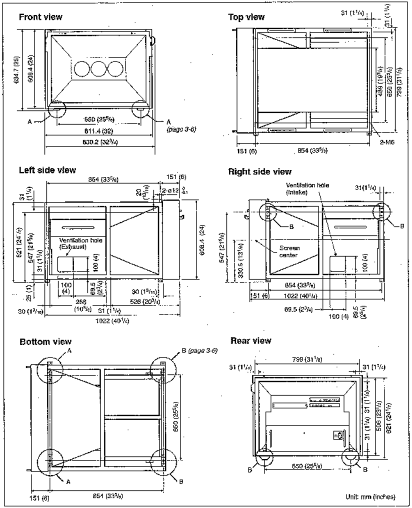


Pin No.	Signal	Input/Output
1	Frame Ground	–
2	Transmit (–)	Output
3	Receive (+)	Input
4	Receive Common	–
5	N.C.	–
6	Transmit Common	–
7	Transmit (+)	Output
8	Receive (–)	Input
9	Frame Ground	–

RS-422 format

Dimensions

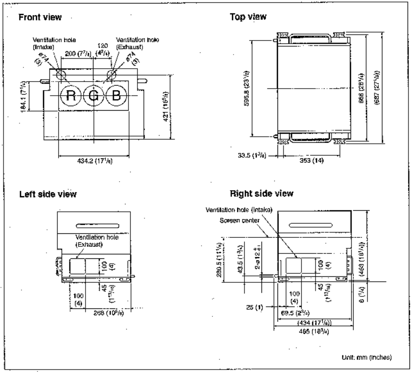
RVP-411DS/411DMS


Front view
694.7 (25)
608.4 (24)
660 (25$^5/_8$)
811.4 (32)
830.2 (32$^3/_4$)
A
A
(page 3-6)
Top view
31 (1$^1/_4$)
31 (1$^1/_4$)
489 (19$^3/_8$)
650 (25$^5/_8$)
799 (31$^1/_2$)
2-M6
151 (6)
854 (33$^5/_8$)
Left side view
854 (33$^5/_8$)
151 (6)
2-ø12
31 (1$^1/_4$)
621 (24$^1/_2$)
547 (21$^5/_8$)
31 (1$^1/_4$)
Ventilation hole (Exhaust)
100 (4)
100 (4)
69.5 (2$^3/_4$)
608.4 (24)
25 (1)
30 (1$^3/_{16}$)
268 (10$^5/_8$)
31 (1$^1/_4$)
30 (1$^3/_{16}$)
526 (20$^3/_4$)
1022 (40$^1/_4$)
Right side view
Ventilation hole (Intake)
31(1$^1/_4$)
B
B
Screen center
547 (21$^5/_8$)
330.5 (13$^1/_8$)
100 (4)
854 (33$^5/_8$)
151 (6)
1022 (40$^1/_4$)
69.5 (2$^3/_4$)
100 (4)
69.5 (2$^3/_4$)
Bottom view
A
B (page 3-6)
650 (25$^5/_8$)
A
B
151 (6)
854 (33$^5/_8$)
Rear view
799 (31$^1/_2$)
31 (1$^1/_4$)
31 (1$^1/_4$)
31 (1$^1/_4$)
31 (1$^1/_4$)
596 (23$^1/_2$)
621 (24$^1/_2$)
650 (25$^5/_8$)
B
B

Unit: mm (inches)

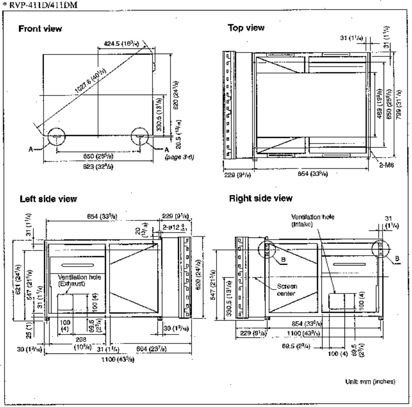
Dimensions

CHP-411D/411DM

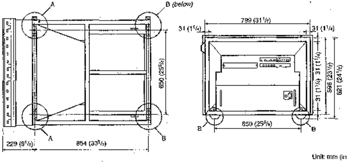

Front view
Ventilation hole (Intake)
Ventilation hole (Exhaust)
200 (7 7/8)
120 (4 3/4)
ø74 (3)
ø74 (3)
R
G
B
184.1 (7 1/4)
421 (16 5/8)
434.2 (17 1/8)
Top view
595.8 (23 1/2)
868 (28 1/4)
(687 (27 1/8))
33.5 (1 3/8)
353 (14)
Left side view
Ventilation hole (Exhaust)
100 (4)
45 (1 13/16)
100 (4)
268 (10 5/8)
Right side view
Ventilation hole (Intake)
Screen center
280.5 (11 1/16)
43.5 (1 3/4)
2-ø12
100 (4)
(469 (18 1/4))
45 (1 13/16)
6 (1/4)
100 (4)
25 (1)
69.5 (2 3/4)
(434 (17 1/8))
465 (18 3/8)
Unit: mm (inches)

RVP-411DS/411DMS with the VPS-411RF Rear Screen

* RVP-411D/411DM


Front view
424.5 (16 3/4)
1027.6 (40 1/2)
620 (24 1/2)
330.5 (13 1/8)
20.5 (13/16)
A
A
(page 3-6)
650 (25 5/8)
823 (32 1/2)
Top view
31 (1 1/4)
31 (1 1/4)
489 (19 3/8)
650 (25 5/8)
799 (31 1/2)
2-M6
229 (9 1/8)
854 (33 5/8)
Left side view
654 (33 5/8)
229 (9 1/8)
20 (13/16)
2-ø12
31 (1 1/4)
621 (24 1/8)
547 (21 5/8)
31 (1 1/4)
Ventilation hole (Exhaust)
100 (4)
620 (24 1/2)
100 (4)
69.5 (2 3/4)
25 (1)
30 (1 3/16)
268 (10 5/8)
30 (1 3/16)
31 (1 1/4)
604 (23 7/8)
1100 (43 3/8)
Right side view
Ventilation hole (Intake)
31 (1 1/4)
B
B
547 (21 5/8)
330.5 (13 1/8)
Screen center
100 (4)
854 (33 5/8)
229 (9 1/8)
1100 (43 3/8)
69.5 (2 3/4)
100 (4)
69.5 (2 3/4)
Unit: mm (inches)

Dimensions

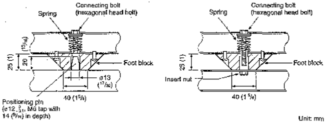


Bottom view

Rear view

A
B (below)
A
B
229 (9¹/₈)
854 (33⁵/₈)
650 (25⁵/₈)
799 (31¹/₂)
31 (1¹/₄)
31 (1¹/₄)
31 (1¹/₄)
31 (1¹/₄)
598 (23¹/₂)
621 (24¹/₂)
650 (25⁵/₈)
B
B

Unit: mm (inches)



Detail view of the cabinet connecting part (A)

Detail view of the cabinet connecting part (B)

Spring
Connecting bolt (hexagonal head bolt)
(¹³/₁₆)
25 (1)
20
Foot block
ø13 (¹⁷/₃₂)
40 (1⁵/₈)
Positioning pin (ø12 ⁰₋₁₁, M6 tap with 14 (⁹/₁₆) in depth)
Spring
Connecting bolt (hexagonal head bolt)
25 (1)
Foot block
Insert nut
40 (1⁵/₈)

Unit: mm (inches)

Required Floor Strength

Make sure to install the projector horizontally on a floor strong enough to support the weight. Installation of multiple projectors in an unstable location may cause serious accidents.

The projector is designed to be loaded with up to five projectors. You can stack six to ten projectors if you reinforce them.

Load Calculation

A projector weighs 82 kg (180 lb 12 oz) when the VPS-411RF screen is attached. Calculate the load on the floor as follows:

$$\frac{[82\ \text{kg} \times \text{A (Number of projectors)}] + \text{Weight of the projection wall stand*}}{[0.91\ \text{(Area of a projector)} \times \text{B (Number of projectors arranged horizontally)}]}$$

= Load on the floor (kg/m²)

* The stand differs in weight depending on its specification.

Calorific Value

Supposing that the power consumption of a projector is 400 W with some allowance and that almost all of the power consumption is converted to calorific power, calculate the calorific value of the projection-wall system.

Calorific Value Calculation

Power consumption (W) × 0.86 = Calorific value (kcal/h)

Conversion to B.t.u.

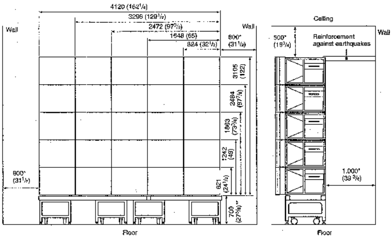
Power consumption (W) × 3.413 = B.t. u./h

Example: When a sixteen- (4 × 4) screen system is used, the total calorific value is

400 (W) × 16 (number of projectors) × 0.86 = 5,504 (Kcal/h)

Air conditioning requirements will likely rise.

Installation Space



* Leave the spaces of 800 mm from the walls on both sides, of 1,000 mm from the wall on the back and of 500 mm from the ceiling, for the purpose of maintenance and adequate ventilation.

** Shows the height of a stand in standard use.

Unit: mm (inches)

Stacking

The projector is designed to be loaded with five units. Reinforcement of the projector enables it to be loaded with six to ten units.

Note on stacking

Depending upon the materials of the floor or walls, installation methods vary. Be sure to consult qualified Sony personnel or a construction engineer.

Temperature and Humidity Condition

Make sure to install and store the projector within the following temperature and humidity range. Installation or store under other ranges may cause abnormal picture display or damage to the projector.

- Operating temperature: 5°C – 40°C
- Operating humidity: 30% – 85% (free of condensation)
- Storage temperature: – 10°C – + 50°C
- Storage humidity: 30% – 90%

Note

Install the projector where
- moisture condensation will not occur.
- it will not be exposed to dripping water.
- it will not be exposed to dust.
- it will not be affected with strong magnetism.

When Moisture Condensation Has Occurred

If the projector is used in winter or in a cold location, moisture may condense on the projector screen or inside the lens, causing a misty picture. In this case, leave the projector on about 1 to 2 hours until the normal picture can be displayed. When you are using the projector under such conditions, turn on the power of the projector 1 or 2 hours before use.

Installing the Projector Other Than Indoors

This projector is designed to be used indoors. If using it outdoors is required, be careful not to expose it to:

- water, dust and wind.
- temperature and humidity changes.
- sunlight that hits the screen surface.

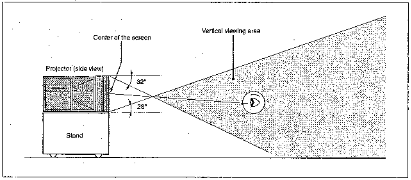
When installing the projector outdoors, make the installation conditions as similar as possible to that of indoor installation, that is, enclose the installation location or cover with a roof.
When installing it outdoors, make sure to consult with the Sony dealer.

Appropriate Viewing Area

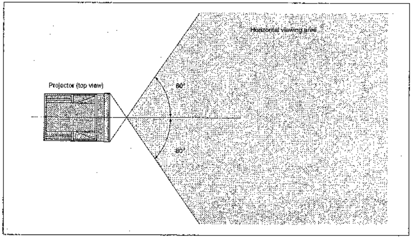
The following values refer to cases with the VPS-411RF screen.

When Using One Unit

Vertical Vewing Area


Center of the screen
Vertical viewing area
Projector (side view)
32°
28°
Stand

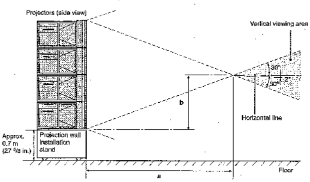
Horizontal Viewing Area


Horizontal viewing area
Projector (top view)
80°
80°

When Using Two or More Units

Example: When 16 units (4 × 4 screens) are installed approximately 0.7 m (27 ⁵/₈ in.) off the floor

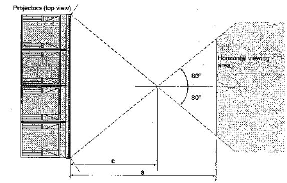
Vertical Viewing Area


Projectors (side view)
Vertical viewing area
30°
2°
30°
b
Horizontal line
Approx. 0.7 m (27 ⁵/₈ in.)
Projection wall Installation stand
a
Floor

a (mm) = 536 × x
b (mm) = 285 × x
(x: Number of the projectors stacked up)

Example:
Stacking up 3 projectors
a: 536 × 3 = 1608 mm
b: 285 × 3 = 855 mm
Stacking up 4 projectors
a: 536 × 4 = 2144 mm
b: 285 × 4 = 1140 mm

Horizontal Viewing Area


Projectors (top view)
Horizontal viewing area
80°
80°
c
a

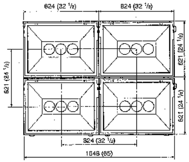
c (mm) = 72.6 × y
(y: Number of the projectors lined up horizontally)

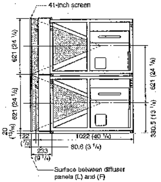
Example:
Lining up 3 projectors
c: 72.6 × 3 = 218 mm
Lining up 4 projectors
c: 72.6 × 4 = 290 mm

The optimum viewing area should be decided by using a longer distance **(a)** or **(c)**. When16 units (4 × 4) are installed, for example, distance **(a)** is longer than **(c)** and the optimum viewing area is as shown in gray areas in the illustrations above.

Optical Distances

Optical distances and pitch between units for the RVP-411DS/411DMS


824 (32 1/2)
824 (32 1/2)
621 (24 1/2)
621 (24 1/2)
621 (24 1/2)
824 (32 1/2)
1648 (65)

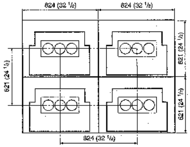

41-inch screen
621 (24 1/2)
621 (24 1/2)
621 (24 1/2)
330.5 (13 1/8)
20 (13/16)
22 (7/8)
1022 (40 1/4)
80.6 (3 1/4)
233 (9 1/4)
Surface between diffuser panels (L) and (F)

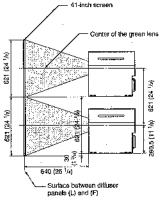
Note
The above dimensions of screen size are based on zero seam.

Screen's aspect ratio: 4:3
Unit: mm (inches)

Optical distances and pitch between units for the CHP-411D/411DM

Recommended installation pitch


824 (32 1/2)
824 (32 1/2)
621 (24 1/2)
621 (24 1/2)
621 (24 1/2)
824 (32 1/2)


41-inch screen
Center of the green lens
621 (24 1/2)
621 (24 1/2)
621 (24 1/2)
621 (24 1/2)
280.5 (11 1/8)
30 (1 3/16)
640 (25 1/4)
Surface between diffuser panels (L) and (F)

Note
The above dimensions of screen size are based on zero seam.

Screen's aspect ratio: 4:3
Unit: mm (inches)

Room Lighting

To obtain the best picture, pay attention to the following:

- Light does not reflect on the screen, unlike a cathode-ray tube. If, however, the screen is exposed directly to sunlight or a spot light, the picture becomes whitish and you may not obtain correct color.
- If you cover the screen with a protective glass or acrylic board, it reflects light.

Current Consumption

As the power consumption of this projector is 300 W, although it changes depending on the use conditions of the projector, the current consumption to the supply voltages is as follows:

Supply voltage	Current consumption
120 V	Approx. 2.6 A
220 V	Approx. 1.5 A
240 V	Approx. 1.4 A

Considering rush current when turning on the power, use the power-on delay function to prevent all the connected projectors from turning on at the same time.
See page 7-8 for the power-on delay function.

Terrestrial Magnetism

Depending on the installation direction, the projected picture may shift on the screen. This is caused by the terrestrial magnetism. Be sure to adjust the shift of the picture after installation of the projector.
The projected picture may also be affected by:

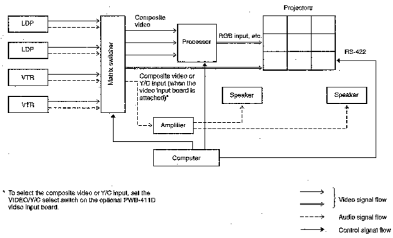
- steel frames of buildings
- electric wires laid on the floor
- a large speaker system
- a metallic stand or picture frame, etc.
- a high-voltage cable

If you install the projector near the above, use the magnetic shield to exclude magnetism.

System Connections

System Connection Example

The basic system connection is shown below.


Projectors
LDP
LDP
VTR
VTR
Matrix switcher
Composite video
Processor
RGB input, etc.
RS-422
Composite video or Y/C input (when the video input board is attached)*
Speaker
Speaker
Amplifier
Computer
Video signal flow
Audio signal flow
Control signal flow

* To select the composite video or Y/C input, set the VIDEO/Y/C select switch on the optional PWB-411D video input board.

Acceptable Signal Specifications

The projector accepts signals with the following specifications. Signals with other specifications may not be projected correctly.

Input signal Analog RGB signal
(When the optional PWB-411D video input board is attached, the composite video signals of the NTSC, PAL, SECAM and NTSC4.43 color systems and the analog color difference signal can be input.)

Input frequency
31.25 kHz/50 Hz/1:1, 31.25 kHz/100 Hz/2:1,
31.5 kHz/60 Hz/1:1, 31.5 kHz/120 Hz/2:1
(Horizontal frequency/vertical frequency/interlace ratio)
allowance: ±1%

15.625 kHz/50 Hz/2:1, 15.75 kHz/60 Hz/2:1 (when the optional PWB-411D video input board is attached)

Inputs

RGB input

R, G, B: 0.7Vp-p±2dB, 75 ohms terminated
Sync on G: 1.0Vp-p±2dB, 75 ohms terminated, sync negative
HD, VD: 1.0-4.0Vp-p, 75 ohms terminated, positive/negative
SYNC: Composite sync, 1.0–4.0Vp-p, 75 ohms terminated, positive/negative

Y, R-Y, B-Y input (when the optional PWB-411D video input board is attached)

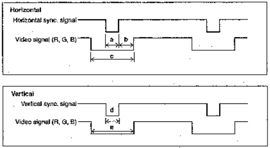
Y: 1.0Vp-p±2dB, 75 ohms terminated, sync negative
R-Y, B-Y: 0.7Vp-p±2dB, 75 ohms terminated

Video input (when the optional PWB-411D video input board is attached)

Composite video: BNC connector, 1.0Vp-p±2dB, 75 ohms terminated, sync negative
Y: BNC connector, 1.0Vp-p±2dB, 75 ohms terminated, sync negative
C: BNC connector, burst level
0.286Vp-p±2dB, 75 ohms terminated (NTSC)
0.3Vp-p±2dB, 75 ohms terminated (PAL)

Timing chart (31K RGB IN connectors on the projector)

a Horizontal sync. signal: more than 2.25μs
b Horizontal back porch: more than 2.25μs
c Horizontal blanking signal: more than 6.0μs
d Vertical sync. signal: more than 2H
e Vertical blanking signal: more than 1000μs


Horizontal
Horizontal sync. signal
Video signal (R, G, B)
a
b
c
Vertical
Vertical sync. signal
Video signal (R, G, B)
d
e

Connecting Cords

Signal cords

Use a 3C-2V coaxial cord for a connecting cord of less than 30 m length, and a 5C-2V coaxial cord for the cord of 30 m–50 m length. If you use a cord of more than 50 m length, use the cord compensator.

SIRCS* cord

The optional PWK-411D system control kit contains a 15 m SIRCS* cord with miniplugs. You can also use a shield cord with low capacity (less than 100 pF/m for 1 kHz) equipped with miniplugs.
This projector is designed to connect a SIRCS cord of up to 20 m length.

* SIRCS is an abbreviation of the Standard Code for Infrared Remote Control.

RS-422 communication cable

The projector is equipped with a RS-422 (REMOTE) connector to connect a computer. *See page 3-2 for its signal assignment.*
The cable should be equipped with a male plug to connect to the female connector on the REMOTE IN connector.

Checking the Installation Conditions

Before installing the projector(s), check the following:

① Dimensions of the installation place
② Floor conditions
  Check that the floor is horizontal and strong enough to support the projector(s), and is not uneven.
③ Location of the wall outlet
④ Installation location
  Check if the floor and wall need to be reinforced.
  Check the transportation route and the passage width, and the dimensions and weight restrictions of any elevator to be used.
⑤ Configuration, installation location and specifications of the external equipment to be connected to the projector
⑥ Model number and the number of equipment to connect
⑦ Check that the lens cap is removed.

Packing size/mass

RVP-411DS/411DMS
Packing size: 930 × 920 × 1150 mm ($36^{5}/_{8}$ × $36^{1}/_{4}$ × $45^{3}/_{8}$ inches) (w/h/d)
Mass: Approx. 97 kg (213 lb 14 oz)

CHP-411D/411DM
Packing size: 560 × 592 × 750 mm ($22^{1}/_{8}$ × $23^{3}/_{8}$ × $29^{5}/_{8}$ inches) (w/h/d)
Mass: Approx. 51 kg (112 lb 7 oz)

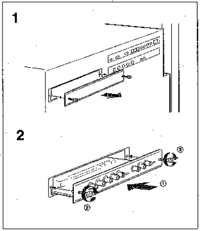
Mass of the RVP-411DS/411DMS with the recommended screen
With the VPS-411RF: Approx. 81 kg (839 lb 15 oz)
With the VPS-415RF: Approx. 79 kg (835 lb 9 oz)

***RVP-411D/411DM**
Packing size: 930 × 920 × 1150 mm ($36^{5}/_{8}$ × $36^{1}/_{4}$ × $45^{3}/_{8}$ inches) (w/h/d)
Mass: Approx. 103 kg (227 lb 1 oz)

Note
When transporting the RVP-411D/411DM, make sure to remove the screen holder from the cabinet (the screen lift attached).

Using the Optional Video Input Board

Attaching the Video Input Board

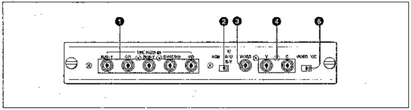


When the optional PWB-411D video input board is used, composite video signals (NTSC, PAL, SECAM and NTSC4.43), 15K analog RGB signal and analog color difference signal can be input to the projector.

1 Remove the two screws on the panel of the optional video input board attachment part to remove the panel.

2 Attach the optional video input board.
① Push in the board so that it fixes tightly to the attachment part.
② Tighten the two screws.

Identifying the Parts on the Video Input Board



❶ 15K RGB IN connectors (BNC connector) R/R-Y, G/Y, B/B-Y, SYNC/HD, VD
Inputs the 15K analog RGB or analog color difference signal.

❷ RGB / Y/R-Y/B-Y select switch
Sets to RGB when the15K analog RGB signal is input and to Y/R-Y/B-Y when the analog color difference signal is input.

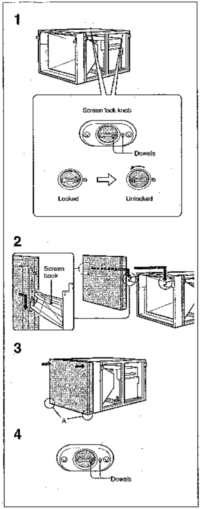
❸ VIDEO input connector (BNC connector)
Inputs the composite video signal.

❹ Y/C input connectors (BNC connectors)
Inputs the Y/C separate video signal.

❺ VIDEO / Y/C select switch
Selects the composite video or Y/C input signal.

About the Screen

Attaching the Screen



Attach the optional VPS-411RF or VPS-415RF screen to the projection wall unit.

1 Turn the screen lock knobs on both sides of the projector while pushing them to unlock.

2 Push to protrude the screen hooks on both sides and align the two projections of both screen hooks with the holes on the reverse of the screen frame. Then push the screen down slowly.

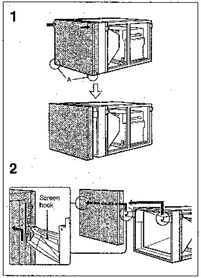
3 Push the upper sides of the screen frame gently until it clicks to fit in.

4 Turn the screen lock knobs until the two dowels on the knob are aligned to lock the screen.

CAUTION
- Do not hold the screen hooks on the cabinet when stacking the projectors at a high place. You may fall and injure yourself.
- Do not pull the lower part of the screen frame (around A) forcibly after it is fitted. If do so, the screen hooks may break and the screen frame cannot be locked.

About the Screen

Removing the screen


1
A
2
Screen hook

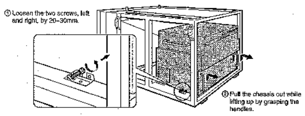
The screen lock knobs on both sides should be unlocked.
Refer to step 1 on page 5-3.

1 Push the upper sides of the screen frame to release the push catches.
The screen frame is automatically released.

CAUTION
When removing the screen frame, do not pull the lower part of the screen frame (around A) forcibly. If do so, the screen hooks may break and the screen frame cannot be locked.

2 Lift the frame upward to remove the screen.
Make sure not to touch the screen frames on other projectors.

Removing the Chassis


① Loosen the two screws, left and right, by 20–30mm.
② Pull the chassis out while lifting up by grasping the handles.

Stacking the Projectors

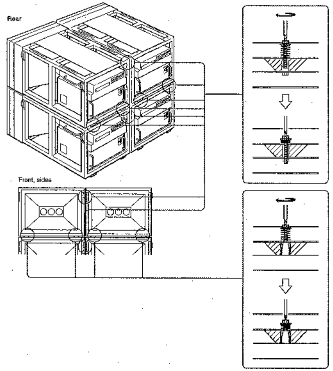
- Use a forklift or similar device to stack the projectors for a projection-wall display.
- Reinforcement is required when you stack more than six projectors vertically.

Before jointing the projectors

Before jointing, adjust the height of the projectors and take measures so that light does not come through a joint, if required *(page 5-6)*.

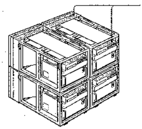
Jointing the Projectors

When you stack the projectors, make sure to tighten the screws on both the rear and front sides of each projector.


Rear
Front, sides

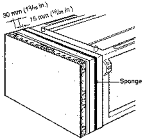
Stacking the Projectors

CAUTION

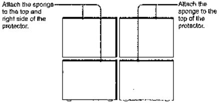

Never climb on to the upper front of the projector or the chassis. You may fall and injure yourself or damage to the projector may occur.

If Outdoor Daylight Comes through the Joints

Attach the 5 mm wide black sponge to the sides required on the screen brackets.


30 mm (1³/₁₆ in.)
15 mm (¹⁹/₃₂ in.)
Sponge

Example: 2 × 2 units (4 screens) projection wall display


Attach the sponge to the top and right side of the protector.
Attach the sponge to the top of the protector.

Setting the Index Number

To address the projector, set an ID (index) number from 000 to 999 on each projector. You can address the projectors in the following two ways:

① **Setting an address ID number on an individual projector**
You can set the desired ID number of a three-digit address number (000–999) on each projector.

② **Setting a group ID number on a group of the projectors**
You can set the group ID number on a group of the projectors in addition to the address ID number. The group ID number enables them to be controlled simultaneously. For example, you can mute only the left half of the projection wall screen.

Setting the ID Numbers

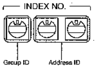
Set the ID and group numbers with the INDEX NO. switches on the rear panel of the projector.

To set the address ID number on an individual projector

Set the desired number from 000 to 999 on a three-digit address number.

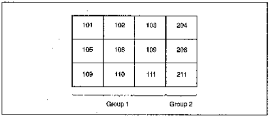
To set the group ID number

The hundreds digit of a three-digit address number is used as a group ID number. Assign the hundreds digit to the group ID number, and the ones and tens digits to the address ID number in a group.

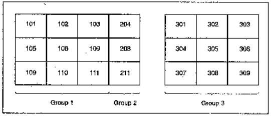

INDEX NO.
Group ID
Address ID

Setting examples for the group ID

Example 1: 12 units (3 × 4 screens)


101
102
103
204
105
106
109
208
109
110
111
211
Group 1
Group 2

Example 2: System with 12 units (3 × 4 screens) and 9 units (3 × 3 screens)


101
102
103
204
105
106
109
208
109
110
111
211
301
302
303
304
305
306
307
308
309
Group 1
Group 2
Group 3

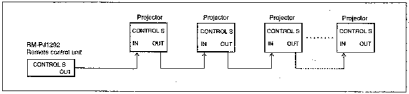
Connecting the Projectors

Connecting the AC Power Cord

Fully insert the supplied 3-pin AC power cord into a wall outlet. Fasten the cord to the projector with the supplied band for a tight connection.

Connecting the SIRCS Cord Supplied with the System Control Kit

Connecting the projectors as shown below using the supplied SIRCS cords (miniplug ←→ miniplug, 1m) allows you to control multiple projectors with the optional remote control unit.


RM-PJ1292
Remote control unit
CONTROL S
OUT
Projector
CONTROL S
IN
OUT
Projector
CONTROL S
IN
OUT
Projector
CONTROL S
IN
OUT
Projector
CONTROL S
IN
OUT

Use the remote control unit and the 15 m cord with miniplugs supplied with the PWK-411D system control kit.

Connecting Signal Cords

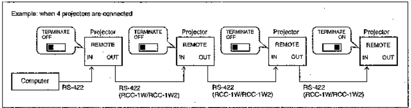
Band the cords together near the plugs so that the connectors are not loaded with the cord's weight or tension. Then fasten the signal cords to the projector with the supplied band well away from the AC power cord. Use the cords of the same length.

When attaching the optional PWB-411D video input board, use the RGB / Y/R-Y/B-Y select switch on the board to select the 15K RGB or Y/R-Y/B-Y input signal, and set the VIDEO / Y/C select switch on the board to select the composite video or Y/C video input signal.

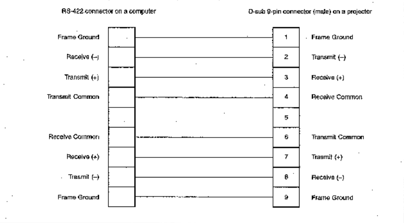
Connecting the Projectors

Connecting the RS-422 Communication Cable

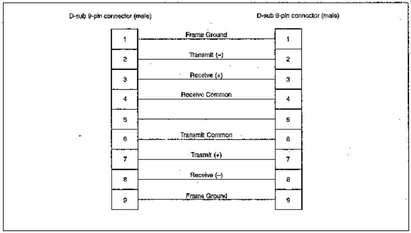
Use the RCC-1W/RCC-1W2 connecting cables between the projectors. Connect them as shown below. Set the TERMINATE switch on the rear panel of the last projector to ON. Between the Receive (+) and (–) terminals on the computer, terminate at 120 ohms.
For connecting the computer and the projector, use the cable of 120 ohms characteristic impedance.


Example: when 4 projectors are connected
TERMINATE OFF
Projector
REMOTE
IN OUT
TERMINATE OFF
Projector
REMOTE
IN OUT
TERMINATE OFF
Projector
REMOTE
IN OUT
TERMINATE ON
Projector
REMOTE
IN OUT
Computer
RS-422
RS-422 (RCC-1W/RCC-1W2)
RS-422 (RCC-1W/RCC-1W2)
RS-422 (RCC-1W/RCC-1W2)

Signal assignment of the RS-422 cable between a computer and a projector

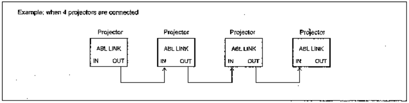

RS-422 connector on a computer
D-sub 9-pin connector (male) on a projector
Frame Ground
Receive (–)
Transmit (+)
Transmit Common
Receive Common
Receive (+)
Trasmit (–)
Frame Ground
1
2
3
4
5
6
7
8
9
Frame Ground
Transmit (–)
Receive (+)
Receive Common
Transmit Common
Trasmit (+)
Receive (–)
Frame Ground

RS-422 cable between the projectors (not supplied, RCC-1W, etc.)


D-sub 9-pin connector (male)
D-sub 9-pin connector (male)
1
2
3
4
5
6
7
8
9
Frame Ground
Transmit (–)
Receive (+)
Receive Common
Transmit Common
Trasmit (+)
Receive (–)
Frame Ground
1
2
3
4
5
6
7
8
9

Connecting the Linked ABL Cable

Connect the projectors using the optional linked ABL cables (miniplug ←→ miniplug) as shown below. Set ABL LINK on the PAGE 3 display to ON for each projector. *(See page 6-49.)*


Example: when 4 projectors are connected
Projector
ABL LINK
IN OUT
Projector
ABL LINK
IN OUT
Projector
ABL LINK
IN OUT
Projector
ABL LINK
IN OUT

Remote Control Operation

All of the adjustments except focus adjustment can be carried out by using the RM-PJ1292 remote control unit (supplied with the PWK-411D system control kit). When using multiple projectors as a projection wall, by setting index numbers, all the projectors can be operated separately or simultaneously with one remote control unit.

Since the RM-PJ1292 is an infrared type, wireless use is possible if the RM-PJ10 remote control receiver is used.
However, in order to correctly control the projectors, connecting the projector and the remote control unit with the remote control cable supplied with the system control kit is recommended.

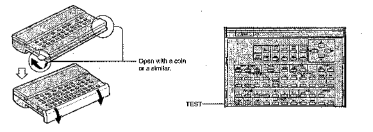
Preparation

1 Insert three size AA (R6) batteries with the polarity lined up correctly. *(See page 6-2.)*

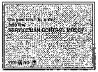
2 Connect the remote control unit to the projector. *(See pages 6-3 and 6-4.)*

3 Press the MAIN POWER switch on the projector.

4 Remove the panel cover of the adjustment keys.
The adjustment keys are usually covered to keep them away from the user serviceable keys. Remove the panel cover only when you use the adjustment keys.



5 Keep pressing the TEST key for 5 seconds.
The display will appear.



Do you wish to enter
into the
SERVICEMAN CONTROL MODE?

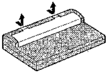
YES: ▲ NO: ▼

6 Press the ▲ key.
The protection on the adjustment keys is cancelled and the adjustment keys will function. After adjustment, activate the protection again. *(See page 7-6.)*

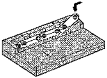
Remote Control Operation

Battery Installation

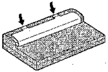
1 Push to open the lid.



2 Install three AA (R6) batteries with the correct polarity.



3 Replace the lid.



Notes on the batteries

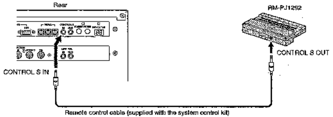
- If the projector does not operate properly, the batteries might be worn out. Replace all three of them with new batteries.
- The life of the batteries depends on frequency of usage and how often you use the LIGHT button. If they wear out quickly, replace them with new alkaline batteries.
- To avoid damage from possible battery leakage, remove the batteries when the remote control unit will not be used for a long time.

For wireless operation

- This projector is not equipped with the remote control detector. For wireless operation, use the RM-PJ10 remote control receiver (not supplied).
- Operable range is limited. The shorter the distance between the remote control unit and the projector, the wider the angle within which the remote control unit can control the projector.

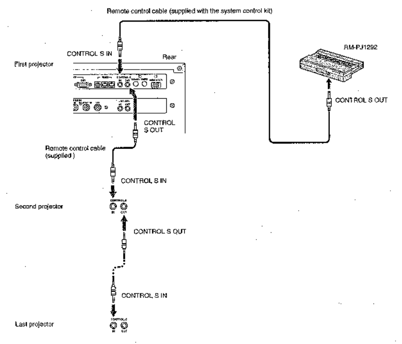
Connecting the Remote Control Unit to the Projector

When using one projector



Remote Control Operation

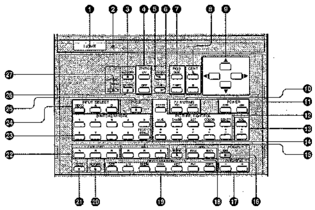
When using multiple projectors


Remote control cable (supplied with the system control kit)
RM-PJ1292
CONTROL S IN
Rear
First projector
CONTROL S OUT
CONTROL S OUT
Remote control cable (supplied)
CONTROL S IN
Second projector
CONTROL S OUT
CONTROL S IN
Last projector

Note on the remote control cable

You can connect all the projectors in any order if they are connected to each other with the remote control cables as illustrated.

Keys on the Remote Control Unit


①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩
⑪
⑫
⑬
⑭
⑮
⑯
⑰
⑱
⑲
⑳
㉑
㉒
㉓
㉔
㉕
㉖
㉗

① LIGHT button
Press to light key indicators.
If the keys are not operated within about 30 seconds the light automatically goes out.

② Transmission indicator
The light goes on each time a key is pressed. When the indicator does not light, replace the batteries.

③ MEMORY key
Press to store various adjustment data into memory.

④ STATUS ON/OFF key
Press OFF to eliminate the "On-Screen display." Even in OFF mode, the PAGE display appears. Press ON to restore the on-screen display.

⑤ SECAM key
This key does not function with this projector.

⑥ C.B. key
This key does not function with this projector.

⑦ RGB SIZE/SHIFT key
Press to adjust the size and shift of the picture for RGB signal input.

SIZE: Press to enter the size adjustment mode. The size adjustment of the picture is performed using the four arrow keys.
▲...The key to expand the vertical size
▼...The key to reduce the vertical size
▶...The key to expand the horizontal size
◀...The key to reduce the horizontal size

SHIFT: Press to enter the shift adjustment mode. The shift adjustment of the picture is performed using the four arrow keys.
The picture shifts according to the direction of the arrow.

Remote Control Operation

⑧ CENT R/B keys
Press to enter the centering adjustment mode of the red and blue.
R: Press to enter the red centering adjustment mode. The adjustment is performed with the four arrow keys.
B: Press to enter the blue centering adjustment mode. The adjustment is performed with the four arrow keys.

If you press R and B simultaneously, the projector is set to green centering adjustment mode.

⑨ Arrow keys
The keys are used for various adjustment function.

⑩ PJ MUTING keys
PIC: Press to cut off the picture. To restore the picture, press it again.
AUDIO: This key does not function with this projector.

⑪ POWER ON/OFF keys
Press to turn on and off the projector.
To turn the projector off or on immediately after turning it on or off, wait for more than 3 seconds.

⑫ PICTURE CONTROL keys
Press to adjust picture conditon: hue, sharpness, brightness, color, and contrast. Press RESET to restore the standard levels.

⑬ VOL (volume) +/– keys
These keys do not function with this projector.

⑭ ADJ R/G/B (adjust red/green/blue) keys
Press to select color to be adjusted when adjusting the registration.
R...Red signal
G...Green signal
B...Blue signal

⑮ BLKG (blanking) key
Press to enter the blanking adjustment mode.
For details, see page 6-25.

⑯ FOCUS MG key
This key does not function with this projector.

⑰ POSITION +/– keys
Used for registration and blanking adjustment.
For details, see page 6-25 and 6-28.

⑱ W/B (white balance) key
Press to enter the white balance adjustment mode.
BIAS: For cut off adjustment
GAIN: For drive adjustment

⑲ REGISTRATION keys
SIZE/LIN/SKEW/BOW/KEY/PIN
Press to select the desired item for registration adjustment.
The ZONE key does not function with this projector.
For details, see "Keys for Registration Adjustment" on page 6-23.

⑳ NORMAL key
Press to cancel the test patterns.

㉑ TEST key
Press to display the internal test patterns.
Each press of this button displays 10 patterns sequentially. In registration and white balance adjustment modes, appropriate patterns will be displayed for each adjustment.
For details, see "Test Patterns" on page 6-11.

㉒ CUT OFF keys
Press to select the color to be turned off when adjusting the registration. Press again to turn on the color.
R...Red signal
G...Green signal
B...Blue signal

㉓ SWITCHER/INDEX keys
When multiple projectors are connected, select the index number of the projector to be adjusted. To select, press the ENTER key ㉖ after pressing the number keys. When adjusting all of the projectors simultaneously, press the ENTER key after pressing 0 (ALL).

㉔ INPUT SELECT keys
Press to select the input signal.
VIDEO: to select the signal input from the VIDEO or Y/C connectors if the optional PWB-411D video input board is installed
To select the VIDEO or Y/C input signal, use the VIDEO / Y/C select switch on the PWB-411D video input board.
A: to select the signal input from the 15K RGB IN connectors if the optional PWB-411D video input board is installed
B: to select the signal input from the 31K RGB IN connectors

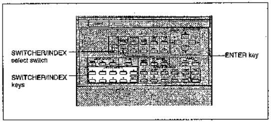
㉕ PAGE key
Press to display and switch the following five on-screen displays.
PAGE 1 (PICTURE CTRL): Displays current picture conditions; contrast, brightness, color, hue and sharpness.
PAGE 2 (INPUT SETTING): Displays the selected registration memory number, color temperature level and adjustable vertical shift range.
PAGE 3 (SET SETTING): Displays on-screen display language, ABL LINK ON/OFF and POWER ON DELAY ON/OFF.
PAGE 4 (SET INFO): Displays use time of red, green and blue CRTs.
PAGE 5 (SERVICE SETTING): Displays the duration of all white mode during a warm-up period and the SUB BRIGHT level.

㉖ ENTER key
In the case of a projection wall, when selecting a projector to be adjusted, press this key after pressing the SWITCHER/INDEX key ㉓. And, press this key when you want to display the ID (index) number of each projector on its screen.

㉗ SWITCHER/INDEX select switch
Always set this switch to INDEX.
If set to SWITCHER, the switch does not function with this projector.

Selecting Projector to Be Adjusted

Using the SWITCHER/INDEX and ENTER keys, select the number corresponding to the index number set on each projector.



1 Set the SWITCHER/INDEX select switch to INDEX.

2 Press the desired SWITCHER/INDEX keys and then the ENTER key.

The index number blinks on the screen for 3 seconds indicating that the projector can be adjusted.

- When the power of the system is turned on, all the projectors can be adjusted at the same time.
- To display the index numbers on the screen, press the ENTER key only. The index numbers of all the projectors will appear on their screens. At this time the number of the projector that can be adjusted will blink.

Selecting an individual projector's index number

Example: To select ID101
  1 → 0 (ALL) → 1 → ENTER
Example: To select ID001
  1 → ENTER
Example: To select ID011
  1 → 1 → ENTER
Example: To select ID000
  0 (ALL) → 0 (ALL) → 0 (ALL) → ENTER

Selecting a group ID

Example: To select the group of ID100-199
  0 (ALL) → 1 (group number) → ENTER
Example: To select all the groups
  0 (ALL) → ENTER

Adjustment Displays and Test Patterns

PAGE Displays

Press the PAGE key to display the following five on-screen displays.
Adjustment can also be done on PAGE 1, 2, 3 and 5.
The displays will switch as follows every time the PAGE key is pressed:

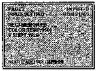
PAGE 1 → PAGE 2 → PAGE 3 → PAGE 4 → PAGE 5
← Original screen ←

PAGE 4 and 5 are not displayed in user control mode.

PAGE 1 (PICTURE CTRL)

The picture conditions: CONTRAST, BRIGHT (brightness), COLOR, HUE and SHARP (sharpness) are displayed. No level indication shows that the control does not function with the current input signal. (In this case, the input signal is 31K RGB signal input from the INPUT-B section.)
To change the level, adjust by pressing ◀, ▶, ▲ and ▼ keys.
For details, see page 7-7.

PAGE 2 (INPUT SETTING)



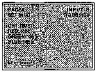
REGI (registration) MEMORY (1 to 8)
Indicates the registration memory number to which the current input signal is assigned.
The registration adjustment data are stored in one of eight memory blocks according to the input signals of different types.
COLOR TEMP (temperature) (3200/6500/9300/PRESET)
Displays the color temperature setting. *For details, see page 7-1.*
V (vertical) SHIFT (Wide/Narrow)
Normally, set to Wide. However, when particular interlace scanning signals with various vertical scanning time are input, V jitter may occur. In this case, set to Narrow.
To change the setting, press the ▲ or ▼ key to make V SHIFT green, and select Wide or Narrow with the ◀ or ▶ key.
When the video, 15K RGB or color difference signal is input, V SHIFT is fixed to Narrow (indicated in white).

PAGE 3 (SET SETTING)

LANGUAGE (English/Francais/Deutsch/Italiano/Espanol)
The on-screen display language can be changed. To change, press the ▲ or ▼ key to make LANGUAGE green, and select the desired language with the ◀ or ▶ key.
ABL LINK (ON/OFF)
When multiple projectors are connected, you can make the multi-screen's brightness uniform. *For details, see page 6-49.*
POWER ON DELAY (ON/OFF)
When multiple projectors are connected, you can turn on the projectors sequencially one by one. *For details, see page 7-8.*

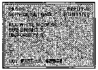
Adjustment Displays and Test Patterns

PAGE 4 (SET INFO)



The current use time of the red, green and blue CRTs are displayd.

PAGE 5 (SERVICE SETTING)



ALL WHITE MODE: You can change the duration of all-white mode during a warm-up period.
For details, see page 6-15.
SUB BRIGHT: You can adjust the brightness uniformity when black is too strong due to the reflection of the sunlight. To adjust, press the ▲ or ▼ key to make SUB BRIGHT green, and adjust with the ◀ or ▶ key.
* **UNIFORMITY:** You can adjust the brightness uniformity at the screen corners. The brightness at the corners is higher with settings A, B and C, in ascending order. UNIFORMITY should normally be set to A or B. If it is set to C, brightness compensation will be effective for a bright image, but will cause inadequate uniformity for a dark image.

Messages on the Screen

Color codes

Four colors are used in the on-screen display.

Color	Meaning
Green	Function and condition
Cyan	Operation guide and messages
Yellow	Caution and error messages
White	Item not being adjusted, item not being selected on PAGE display

Error messages

When an error occurs, the following messages will be displayed.

Message	Meaning
Not applicable	The control does not function with the current input.
PIC MUTING	PIC MUTING is set to ON. Press PJ MUTING PIC key to cancel the PIC MUTING mode.
NO INPUT	No video or sync signal is input in the selected input mode.

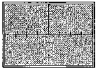
Test Patterns

In each adjustment mode, an appropriate test pattern can be displayed. In addition, other test patterns can be displayed by pressing the TEST key.

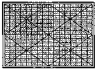
All the test patterns

The outside bold line of the illustrations stands for the edge of the screen.

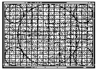
① Cross hair



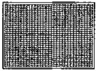
② Diagonal



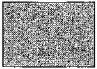
③ Circle



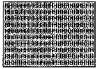
④ Hatch (fine)



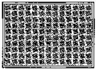
⑤ Dot



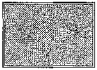
⑥ H pattern



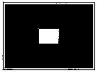
⑦ ME



⑧ All white



⑨ Window



⑩ Black

---

* This setting is not RVP-411D/411DM

Adjustment Displays and Test Patterns

Test Patterns in each mode

Mode		By pressing the TEST key, test patterns change as follows:
Normal		→ Cross hair → Diagonal → Hatch → Dot → H Normal ← Black ← Window ← White ← ME
Registration	SIZE LIN WAVE SKEW BOW KEY PIN WING	→ Cross hair → Diagonal → Circle Normal ← Hatch
White balance	GAIN BIAS	White → Window → Black → Normal
BLKG		Hatch → White → Normal
CENT RGB		Cross hair → Diagonal → Normal

Note

When the signal from the connected equipment is input, the test pattern cannot shift using the SHIFT key.

Signal Sources and Adjustment Equipment

The following equipment and signal sources are necessary for the adjustment.

Adjustment Equipment Required

- RM-PJ1292 Remote Control Unit
- Connecting cord with miniplugs (10–30 m)
- Signal generator (Astro Design VG-814, etc.)
- Measuring tape
- Color temperature meter (such as Minolta CS-100 colorimeter)
- Stepladder and binoculars when the screen is difficult to access.
- Moving picture source

Specifications of the signal from the video signal generator

Use the following signal when the video signal generator is used instead of the signal input source of the system.

Frequency: the same frequency as that used in the system

Sync signal: any of S on G, c/sync and H/V sync signals

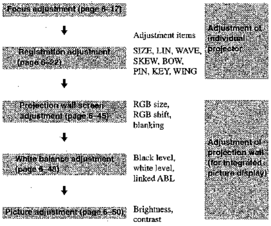
Test pattern: White 10%, 50% and 80% switchable (for white balance adjustment)

Hatch pattern (for wall projection screen adjustment)

General Flowchart of the Adjustments

Perform the adjustments after completing the installation and connections. Before the adjustments, turn on the projectors and allow them to warm up for 20 minutes or more to keep a stabilized display. *(See page 6-15.)*

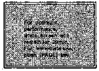
Flowchart of the Adjustments


Focus adjustment (page 6-17)
Adjustment items
Registration adjustment (page 6-22)
SIZE, LIN, WAVE, SKEW, BOW, PIN, KEY, WING
Adjustment of individual projector
Projection wall/screen adjustment (page 6-45)
RGB size, RGB shift, blanking
White balance adjustment (page 6-48)
Black level, white level, linked ABL
Picture adjustment (page 6-50)
Brightness, contrast
Adjustment of projection wall (for integrated picture display)

Warming-up

Before Starting Adjustment

Before adjusting the registration, turn on the projector and allow it to warm up for 20 minutes.
The projector is designed with a warm-up period of about 20 minutes after turning on the power. During this period, it displays a white screen with the message shown below. The message will appear subsequently for 5 seconds every 30 seconds.


For optimum performance, white screen will remain for 20min. For immediate use, push [PAGE] key.

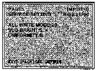
If you wish to see the picture immediately, press the PAGE key to cancel the warming up.
You may also set the projector for a shorter or no warming up period.
For details, see "Changing the Initialization Period" below.

Changing the Initialization Period

You can set the desired warm up time for the projector in 1 minute increments.

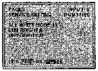
1 Set the remote control to the serviceman adjustment mode.
For details, see "Remote Control Operation" on page 6-1.

2 Press the PAGE key repeatedly until the PAGE 5 (SERVICE SETTING) display appears.


PAGE5 INPUT-8
SERVICE SETTING RGB31/60
ALL WHITE MODE:20
SUB BRIGHT:5
UNIFORMITY:0
EXIT: [PAGE] SEL: [ENTER]

3 Press the ▼ or ▲ key to select ALL WHITE MODE.

4 Press the ◀ or ▶ key to set the desired minutes.
You can set the initialization period to 0 – 99 minutes.
▶: Increases by 1 minute.
◀: Decreases by 1 minute.



5 Press the PAGE key.
The display disappears.

To set the projector so that the signal input from the connected equipment appears on the screen immediately after the power is turned on
Set the initialization period to "0."

Adjusting the Focus

Since the projector is focused at the factory, usually foucus adjustrment is not necessary. Adjust the lens focus only when it is very out of focus. If sharp focus cannot be obtained with the lens focus adjustment, perform the electric focus adjustment.

Procedure of the Focus Adjustment

1 Open the top cover of the chassis. *(page 6-18)*

↓

2 Set the remote control unit to the serviceman adjustment mode. *(page 6-1)*

↓

3 Select the RGB input without connecting the input source (NO INPUT mode). *(page 6-18)*

↓

4 Display the H-pattern. *(page 6-18)*

↓

5 Set the CONTRAST level to 80 and BRIGHT (brightness) level to 50. *(page 6-19)*

↓

6 Adjust the green lens focus. *(page 6-19)*

↓

7 Adjust the red lens focus. *(page 6-19)*

↓

8 Adjust the blue lens focus. *(page 6-19)*

↓

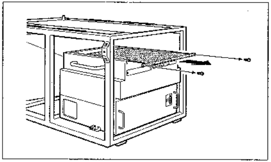
9 Adjust the electric focus. *(page 6-20)*
(Only when not in focus with the lens focus adjustment)

Proceed to the registration adjustment. *(page 6-22)*

Adjusting the Focus

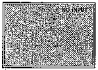
Adjusting the Lens Focus

1 Open the top cover of the chassis.
① Remove the two screws.
② Slide to open the top cover until the lenses are visible.

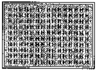


2 Make the adjustment keys on the remote control unit operable. *(See page 6-1.)*

3 Press the INPUT SELECT B key. (NO INPUT mode)
Make sure that "NO INPUT" is displayed on the screen.

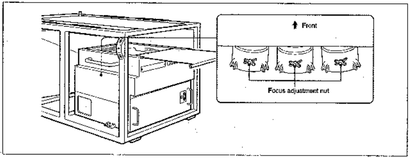


4 Press the TEST key on the remote control unit repeatedly until the H pattern appears on the screen.

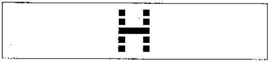


5 Press the PICTURE CONTROL CONTR and BRT keys to set the CONTRAST adjustment level to 80 and BRIGHT level to 50.

6 Adjust the green focus.
① Press the CUT OFF R and B keys to display the green signal only.
② Loosen the focus adjustment nut of the green lens and slide it so that the letters H at the center of the screen and the center of the right and left ends are in optimum focus.
③ Tighten the screw.



Hint for lens focus adjustment
The letter H is made up of dots. If it is in focus, the dots will be clearly seen as in the illustration. (Only for green and red)



7 Adjust the red focus.
① Press the CUT OFF G and B keys to display the red signal only.
② Adjust the red focus using the focus adjustment nut of the red lens following the same procedure as for the green focus.

8 Adjust the blue focus.
① Press the CUT OFF G and R keys to display the blue signal only.
② Adjust the blue focus using the focus adjustment nut of the blue lens following the same procedure as for the green focus.

The lens focus adjustment is complete.
Proceed to the registration adjustment *(page 6-22)*.

Note
When you cannot see the letter H clearly as seen in step **6** with the green and red focus adjustments, perform the electric focus adjustment *(page 6-20)*.

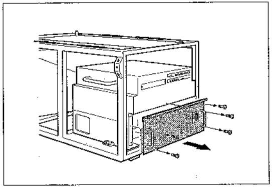
Adjusting the Focus

Adjusting Electric Focus

When you cannot obtain sharp focus with the lens focus adjustment, perform the green and red electric focus adjustments using the controls at the rear of the projector.

Do not adjust the blue electric focus.

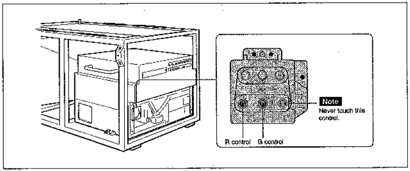
1 Remove the five screws on the lower rear cover to remove.



2 Press the TEST key repeatedly until the H pattern appears on the screen.

3 Press the PICTURE CONTROL RESET key to reset the CONTRAST level to 80 and the BRIGHT (brightness) level to 50.

4 Adjust the green electric focus.
① Press the CUT OFF R and B keys to display the green signal only.
② Adjust focus by turning the G control.



5 Adjust the red electric focus.
① Press the CUT OFF G and B keys to display the red signal only.
② Adjust focus by turning the R control.

Hint 1

Since the focus adjustment level varies with the brightness of the screen, set the CONTRAST level for normal projection.

Hint 2

When a high-resolution picture is projected while adjusting the focus, a sharper focus may be obtained. Set the CONTRAST level for normal projection.

Blue electric focus adjustment

If the blue color is precisely in focus, the brightness of the picture will be reduced, so that it is set a little out of focus at the factory.
If you set the blue color in focus upon customer's request, readjust the white balance after adjusting the electric focus.

Adjusting Registration

Display the test pattern on the screen and adjust the registration.
Perform green, red and blue adjustments in this order to converge the three colors.

Procedure of the Registration Adjustment

1 Mark the center of the screen. *(page 6-24)*

↓

2 Set the remote control unit to the serviceman adjustment mode. *(page 6-1)*

↓

3 Select the input which the system actually uses. *(page 6-24)*

↓

4 Reset the standard data to the factory preset level.
(only when the adjustment data has been saved before) *(page 7-4)*

↓

5 Release blanking adjustment. *(page 6-25)*

↓

6 Adjust the green registration. *(page 6-28)*
① Centering adjustment
② Size and linearity adjustment
③ Wave-like distortion adjustment
④ Trapezoidal distortion adjustment
⑤ Quaternary adjustment
⑥ Asymmetrical pin distortion adjustment
⑦ Symmetrical pin distortion adjustment
⑧ LIN, KEY, PIN, WAVE and WING adjustments in sections

↓

7 Adjust the red registration. *(page 6-43)*
① Centering adjustment
② Size and linearity adjustment
③ Wave-like distortion adjustment
④ Trapezoidal distortion adjustment
⑤ Quaternary adjustment
⑥ Asymmetrical pin distortion adjustment
⑦ Symmetrical pin distortion adjustment
⑧ LIN, KEY, PIN, WAVE and WING adjustments in sections

↓

8 Adjust the blue registration. *(page 6-44)*
① Centering adjustment
② Size and linearity adjustment
③ Wave-like distortion adjustment
④ Trapezoidal distortion adjustment
⑤ Quaternary adjustment
⑥ Asymmetrical pin distortion adjustment
⑦ Symmetrical pin distortion adjustment
⑧ LIN, KEY, PIN, WAVE and WING adjustments in sections

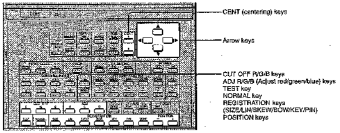
↓

9 Activate the protection on the remote control unit. *(page 7-6)*

↓

Complete.

Keys for Registration Adjustment



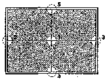
Identifying the REGISTRATION keys

Indications on the remote control unit	Adjustment items
CENT	centering
SIZE	size
LIN	linearity
SKEW	skew
BOW	bow
KEY	keystone, wave
PIN	pincushion, wing

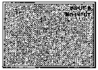
Adjusting Registration

Preparing for the Registration Adjustment

1. Mark the center of the screen.
   Measure the length and width of the screen with a measure tape to decide the center.
   Marking five points as illustrated with white tape will help you adjust registration.



2. Set the remote control unit to the serviceman adjustment mode. *(See page 6-1.)*
3. Select the input which the system actually uses.
   Make sure the picture is displayed on the screen.

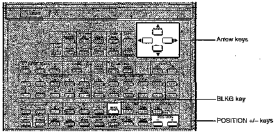


Note
Inputting the 15 kHz sequential scanning signal may affect the test pattern.

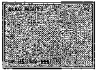
4. Reset the standard data.
   (Only if the registration adjustment has been performed and the data has been saved before)
   See page 7-4 for how to reset the data.

Releasing Blanking Adjustment

The registration adjustment is difficult if the entire test pattern is not visible. Follow the steps below to make the whole test pattern visible.



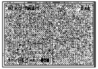
1. Press the BLKG key to enter the blanking adjustment mode.



2. Press the TEST key to display the hatch pattern.
3. Press the POSITION +/– keys to select the part to be adjusted.
   When the + key is pressed, the position will change as follows:
   RIGHT → LEFT → TOP → BOTTOM
   When the – key is pressed, the position will change in the reverse order.

Adjusting Registration

4 Press the ▲, ▼, ◀ and ▶ keys until the adjustment levels of the RIGHT, LEFT, TOP and BOTTOM positions are set to "255."
The blanking is released.
▶: to adjust RIGHT, ◀: to adjust LEFT
▲: to adjust TOP, ▼: to adjust BOTTOM



Note
There may be a rainbow-like vertical band on the right side or a diagonal line on the upper part of the screen.
As they can be adjusted with the blanking adjustment later *(see page 6-46)*, leave them alone for now.

Registration Adjustment Items

Adjustment item	Display	Keys to be used for each adjustment	Adjustment type	
			H	V
CENT	CENT R/B	CENT	*	*
SIZE	SIZE	SIZE	*	*
	MID SIZE	SIZE	*	*
	5-SIZE	SIZE	*	*
LIN	LIN	LIN	*	*
	MID LIN	LIN	*	*
	6-LIN	LIN	*	*
	R. LIN	LIN, POSITION +/–	*	–
	L. LIN	LIN, POSITION +/–	*	–
	R. MID LIN	LIN, POSITION +/–	*	–
	L. MID LIN	LIN, POSITION +/–	*	–
	T. LIN	LIN, POSITION +/–	–	*
	B. LIN	LIN, POSITION +/–	–	*
	T. MID LIN	LIN, POSITION +/–	–	*
	B. MID LIN	LIN, POSITION +/–	–	*
WAVE	WAVE	KEY	–	*
	R. WAVE	KEY, POSITION +/–	*	–
	L. WAVE	KEY, POSITION +/–	*	–
	R. MID WAVE	KEY, POSITION +/–	*	–
	L. MID WAVE	KEY, POSITION +/–	*	–
	T. WAVE	KEY, POSITION +/–	–	*
	B. WAVE	KEY, POSITION +/–	–	*
	T. MID WAVE	KEY, POSITION +/–	–	*
	B. MID WAVE	KEY, POSITION +/–	–	*

H : Horizontal adjustment
V : Vertical adjustment
* : functions
– : not function

Adjustment item	Display	Keys to be used for each adjustment	Adjustment type	
			H	V
SKEW	SKEW	SKEW	*	*
	SUB SKEW	SKEW	*	*
	3-SKEW	SKEW	*	*
BOW	BOW	BOW	*	*
	SUB BOW	BOW	*	*
	MID BOW	BOW	*	–
	4-BOW	BOW	*	*
PIN	PIN	PIN	*	*
	MID PIN	PIN	*	*
	R. PIN	PIN, POSITION +/–	*	–
	L. PIN	PIN, POSITION +/–	*	–
	R. MID PIN	PIN, POSITION +/–	*	–
	L. MID PIN	PIN, POSITION +/–	*	–
	T. PIN	PIN, POSITION +/–	–	*
	B. PIN	PIN, POSITION +/–	–	*
	T. MID PIN	PIN, POSITION +/–	–	*
	B. MID PIN	PIN, POSITION +/–	–	*
KEY	KEY	KEY	*	*
	MID KEY	KEY	–	*
	R. KEY	KEY, POSITION +/–	*	–
	L. KEY	KEY, POSITION +/–	*	–
	R. MID KEY	KEY, POSITION +/–	*	–
	L. MID KEY	KEY, POSITION +/–	*	–
	T. KEY	KEY, POSITION +/–	–	*
	B. KEY	KEY, POSITION +/–	–	*
	T. MID KEY	KEY, POSITION +/–	–	*
	B. MID KEY	KEY, POSITION +/–	–	*
WING	WING	PIN	*	*
	SUB WING	PIN	*	–
	R. WING	PIN, POSITION +/–	*	–
	L. WING	PIN, POSITION +/–	*	–
	R. MID WING	PIN, POSITION +/–	*	–
	L. MID WING	PIN, POSITION +/–	*	–
	T. WING	PIN, POSITION +/–	–	*
	B. WING	PIN, POSITION +/–	–	*
	T. MID WING	PIN, POSITION +/–	–	*
	B. MID WING	PIN, POSITION +/–	–	*

H : Horizontal adjustment
V : Vertical adjustment
* : functions
– : not function

Adjusting Registration

To select the supplementary adjustments of each item (e.g. SUB SKEW, MID PIN), press the corresponding adjustment key repeatedly until the desired supplementary adjustment item appears on the screen.

Example: To select the supplementary adjustment item of the SIZE adjustment, press the SIZE key repeatedly. The display changes as follows every time you press the SIZE key:

SIZE → MID SIZE → 5-SIZE

To select the adjustment in sections for each item (e.g. R. LIN, B. MID KEY), press the corresponding adjustment key repeatedly until the desired supplementary adjustment item appears, then select the desired section with the POSITION + or – key.

Example: To select the adjustment in sections for the MID LIN adjustment, press the LIN key twice to choose MID LIN. Then press the POSITION + or – key repeatedly. The display changes as follows every time you press the POSITION + or – key.

MID LIN ←→ R. MID LIN ←→ L. MID LIN ←→ T. MID LIN ←→ B. MID LIN

(+ key: →, – key: ←)

After displaying the desired adjustment item, adjust distortion with the arrow keys.

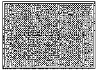
Adjusting the Green Registration

Be sure to adjust starting with the green test pattern.

Green centering adjustment

Adjust so that the center of the test pattern is aligned with the center of the screen.

1. Press CENT R and B keys simultaneously, then press the TEST key. The cross hair pattern is displayed.
2. Press the CUT OFF R and B keys to display green only.
3. Adjust with the ▲, ▼, ◀ and ▶ keys so that the center of the cross hair pattern is aligned with the center of the screen (joint of the screen retainers). The dotted line shows the adjustable part by pressing the arrow keys.

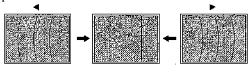


Continue the adjustments using the items on pages 6-29 and 6-30.
The dotted lines in the following illustrations show the adjustable parts by pressing the arrow keys.

A Vertical line adjustment

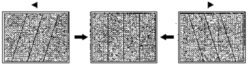
BOW adjustment

Adjust the bow-like distortion of the vertical center line of the cross hair pattern.



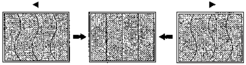
SKEW adjustment

Adjust the tilt of the vertical center line of the cross hair pattern.



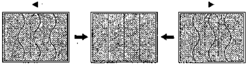
3-SKEW adjustment

Adjust the wave-like distortion of the vertical center line of the cross hair pattern.



4-BOW adjustment

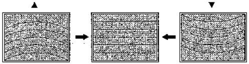
Adjust the quaternary distortion of the vertical center line of the cross hair pattern.



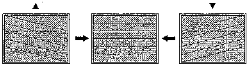
Adjusting Registration

B Horizontal line adjustment

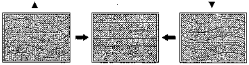
BOW adjustment
Adjust the bow-like distortion of the horizontal center line of the cross hair pattern.



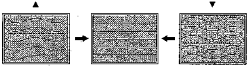
SKEW adjustment
Adjust the tilt of the horizontal center line of the cross hair pattern.



3-SKEW adjustment
Adjust the wave-like distortion of the horizontal center line of the cross hair pattern.



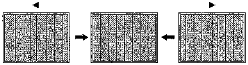
4-BOW adjustment
Adjust the quaternary distortion of the horizontal center line of the cross hair pattern.



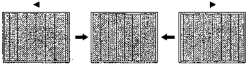
Green size and linearity adjustments

Horizontal linearity adjustment

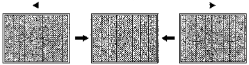
1. Adjust the balance of the sizes at both sides of the center of the screen with the MID LIN (linearity) adjustment.



2. Adjust the balance of the sizes on the right and left ends of the screen with the LIN (linearity) adjustment.



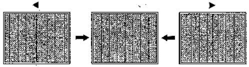
3. Adjust the balance of the sizes on the right and left sides of the center section of the screen with the 6-LIN adjustment.



4. Repeat the MID LIN, LIN and 6-LIN adjustments alternately until the sizes of the horizontal lines at the center of the screen are symmetrical right and left.

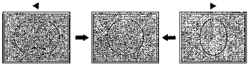
Horizontal size adjustment

1. Adjust with the MID SIZE adjustment so that the sizes of both sides of the center section and of both ends of the screen are equal.

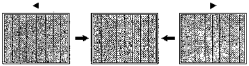


Adjusting Registration

2 Adjust with the SIZE adjustment so that the horizontal size fits the projector cabinet.



3 Adjust with the 5-SIZE adjustment so that the sizes of the right and left sides of the center section of the screen are equal.

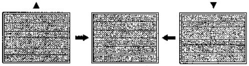


4 Repeat the MID SIZE, SIZE and 5-SIZE adjustments alternately until the vertical line intervals for the horizontal line of the center section are equal.

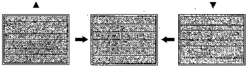
Note
If you change the linearity setting after the MID SIZE, SIZE and 5-SIZE adjustments are complete, repeat linearity and size adjustments.

Vertical linearity adjustment

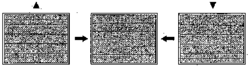
1 Adjust the balance of the sizes at both sides of the center of the screen with the MID LIN (linearity) adjustment.



2 Ajust the balance of the sizes on the upper and lower parts of the center section of the screen with the 6-LIN adjustment.

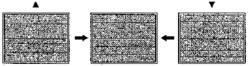


3 Adjust the balance of the sizes at the top and bottom of the screen with the LIN adjustment.

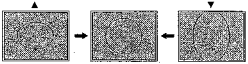


Vertical size adjustment

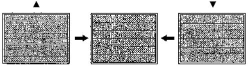
1 Adjust with the MID SIZE adjustment so that the sizes of both sides of the center section and of both ends of the screen are equal.



2 Adjust with the SIZE adjustment so that the vertical size fits the projector cabinet.



3 Adjust with the 5-SIZE adjustment so that the sizes of the upper and lower parts of the center section of the screen are equal.



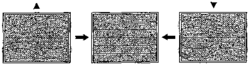
4 Repeat the MID SIZE, SIZE and 5-SIZE adjustments alternately until the horizontal line intervals of the center section are equal.

Note
If the linearity setting is changed after the MID SIZE, SIZE and 5-SIZE adjustments are complete, repeat linearity and size adjustments.

Adjusting Registration

WAVE adjustment

Adjust the wave-like distortion of the horizontal lines at the top and bottom sections of the screen.

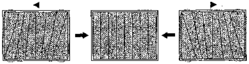


Note
After WAVE adjustment is complete, there may be keystone distortion. Repeat the WAVE and KEY adjustments alternately.

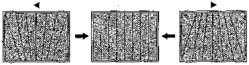
Green trapezoidal distortion adjustment

Horizontal trapezoidal distortion adjustment

1 Adjust with the SUB SKEW adjustment so that the tilt of the vertical lines on the right and left ends of the screen is symmetrical.



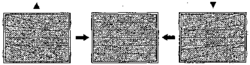
2 Adjust with the KEY adjustment so that there is no tilt in the vertical lines at both ends of the screen.



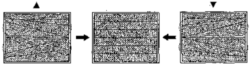
Note
If there is a tilt on either the right or left end after the KEY adjustment, repeat the SUB SKEW and KEY adjustments alternately.

Vertical trapezoidal distortion adjustment

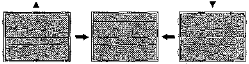
1 Adjust with the SUB SKEW adjustment so that the tilt of the horizontal lines at the top and bottom sections of the screen is symmetrical.



2 Adjust with the MID KEY adjustment so that there is no tilt in the horizontal lines at the center section of the screen.



3 Adjust with the KEY adjustment so that there is no tilt in the horizontal lines at the top and bottom sections of the screen.



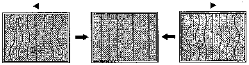
4 Repeat the MID KEY and KEY adjustments until there is no tilt in the horizontal lines on the entire screen.

Note
If the tilt of the horizontal lines becomes asymmetrical after the MID KEY and KEY adjustments are complete, adjust with the SUB SKEW adjustment again.

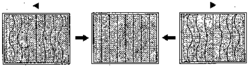
Green quaternary distortion adjustment

Horizontal quaternary distortion adjustment

1 Adjust the quaternary distortion with the WING adjustment.



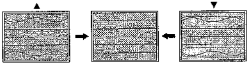
2 Adjust with the SUB WING adjustment so that the quaternary distortion of the right and left ends is symmetrical.



3 Repeat the WING and SUB WING adjustments alternately.

Vertical quaternary distortion adjustment

1 Adjust quaternary distortion of the horizontal lines at the top and bottom sections of the screen with the WING adjustment.



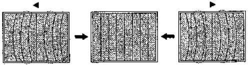
Notes

- Since vertical distortion cannot be adjusted with the SUB WING adjustment, there may be a slight imbalance. Adjust to minimize the distortion with the step above.
- The horizontal lines at the top and bottom sections may not be straight. If the distortion is not big enough that it can be corrected with the PIN adjustment, proceed with the following steps.

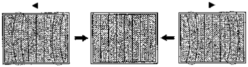
Green asymmetrical pin distortion adjustment

Horizontal asymmetrical pin distortion adjustment

1 Adjust with the MID BOW adjustment so that the bow-like distortion at both sides of the center section of the screen is symmetrical.



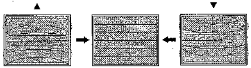
2 Adjust with the SUB BOW adjustment so that pin distortion on the right and left ends of the screen is symmetrical.



3 Repeat the MID BOW and SUB BOW adjustments alternately until the vertical lines on the entire screen are symmetrical left and right.

Vertical asymmetrical pin distortion adjustment

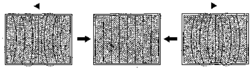
1 Adjust with the SUB BOW adjustment so that pin distortion at the top and bottom sections is symmetrical.



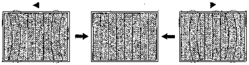
Green symmetrical pin distortion adjustment

Horizontal symmetrical distortion adjustment

1 Adjust pin distortion at both sides of the center section of the screen with the MID PIN adjustment.



2 Adjust pin distortion on the right and left ends of the screen with the PIN adjustment.

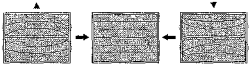


3 Repeat the MID PIN and PIN adjustments alternately until the vertical lines on the entire screen are straight.

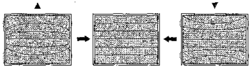
Note
If there is asymmetrical pin distortion after the MID PIN and PIN adjustments are complete, repeat the MID BOW and SUB BOW adjustments alternately.

Vertical symmetrical pin distortion

1 Adjust pin distortion at both sides of the center section of the screen with the MID PIN adjustment.



2 Adjust pin distortion at the top and bottom sections of the screen with the PIN adjustment.



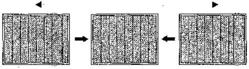
3 Repeat the MID PIN and PIN adjustments alternately until the horizontal lines on the entire screen are straight.

4 After the adjustments in steps **1** to **3** are complete, repeat the SUB BOW, MID PIN and PIN adjustments in these order.

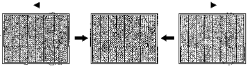
Green adjustments in sections

Horizontal LIN, KEY, PIN, WAVE and WING adjustments in the right section

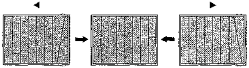
1 Adjust the linearity on the right end of the screen with the R. LIN adjustment.



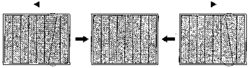
2 Adjust the linearity on the right side of the center section of the screen with the R. MID LIN adjustment.



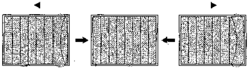
3 Adjust the tilt of the vertical line on the right end of the screen with the R. KEY adjustment.



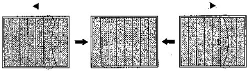
4 Adjust the tilt of the vertical line on the right side of the center section of the screen with the R. MID KEY adjustment.



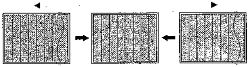
5 Adjust the bow-like distortion of the vertical line on the right end of the screen with the R. PIN adjustment.



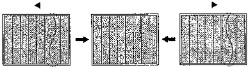
6 Adjust the bow-like distortion of the vertical line on the right side of the center section of the screen with the R. MID PIN adjustment.



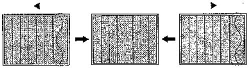
7 Adjust the wave-like distortion of the vertical line on the right end of the screen with the R. WAVE adjustment.



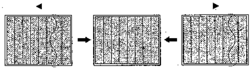
8 Adjust the wave-like distortion of the vertical line on the right side of the center section of the screen with the R. MID WAVE adjustment.



9 Adjust the quaternary distortion of the vertical line on the right end of the screen with the R. WING adjustment.



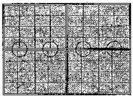
10 Adjust the quaternary distortion of the vertical line on the right side of the center section of the screen with the R. MID WING adjustment.



11 Adjust the horizontal adjustments in the left section, and the vertical LIN, KEY, PIN, WAVE and WING adjustments in the upper and lower sections. Adjustment procedures are the same as those in step **1** to **10** above.

Green adjustment on the projection wall screen

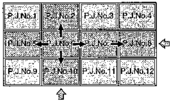
After the green registration of the indivisual projector is completed, correct the imbalance of the green signal on the projection wall screen.
Check if the vertical and horizontal lines of the hatch patterns are joined straight on the projection wall screen. For example, if lines deviate due to the linearity imbalance among the projectors, readjust the linearity of each projector as follows:



The lines at the encircled portions in the illustration deviate.

1 Select a projector in the center zone as the reference unit for linearity adjustment.

When projector P.J. No.6 is selected as a reference unit

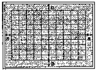


Adjust the horizontal linearity with this row.

Adjust the vertical linearity with this column.

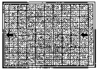
2 Press the LIN key.
Press the TEST key to select the hatch pattern.

3 Press the ADJ G key.

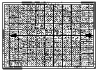


4 Adjust with the ◀ and ▶ keys until parts (a) on the right and left are of equal length.

◀: The right and left vertical lines are shifted to the left while the vertical center line remains unmoved.

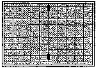


▶: The right and left vertical lines are shifted to the right while the vertical center line remains unmoved.

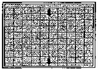


5 Adjust with the ▲ and ▼ keys until parts (b) at the top and bottom are of equal length.

▲: The upper and lower horizontal lines are shifted upward while the horizontal center line remains unmoved.



▼: The upper and lower horizontal lines are shifted downward while the horizontal center line remains unmoved.



6 If the center of the hatch pattern is off-centered on the projection wall screen, perform the centering adjustment again and then repeat steps **2** to **5**. *(See page 6-28 for centering adjustment.)*

7 After the adjustment is completed, press the MEMORY key to save the adjustment data.

8 Adjust the next projector using the reference unit as a standard.

The green registration adjustment is all completed.
Proceed to the adjustment for the red signal.

Adjusting the Red Registration

Display the green, red and blue signals on the screen and adjust the red signal so that it converges with the green signal. If it is difficult to see the display, press the CUT OFF B key to turn off the blue signal.

Red centering adjustment

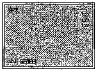
Adjust so that the center of the red test pattern is aligned with that of the green pattern.

1 Press the CENT R key.

2 Adjust with the ▲, ▼, ◀ and ▶ keys so that the center of the red cross hair pattern is aligned with that of the green pattern.

Red SIZE, LIN, WAVE, SKEW, BOW, PIN, KEY and WING adjustments

Adjust so that the red signal converges with the green signal in each adjustment. The procedures are the same as for the green registration adjustments *(pages 6-29 to 6-40)*.
Make sure that "R" is displayed on the screen when adjusting the red signal.



When the red adjustment is complete, press the MEMORY key to save the adjustment data.

Adjusting the Blue Registration

Display the green, red and blue signals on the screen and adjust the blue signal so that it converges with the green signal. If it is difficult to see the display, press the CUT OFF R key to turn off the red signal.

Blue centering adjustment

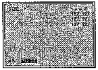
Adjust so that the center of the blue test pattern is aligned with that of the green pattern.

1 Press the CENT B key.

2 Adjust with the ▲, ▼, ◀ and ▶ keys so that the center of the blue cross hair pattern is aligned with that of the green pattern.

Blue SIZE, LIN, WAVE, SKEW, BOW, PIN, KEY and WING adjustments

Adjust so that the blue signal converges with the green signal in each adjustment. The procedures are the same as for the green registration adjustments *(pages 6-29 to 6-40)*.
Make sure that "B" is displayed on the screen when adjusting the blue signal.

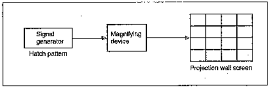


When the blue adjustment is complete, press the MEMORY key to save the adjustment data.

Adjusting the Projection Wall Screen (Centering and Size)

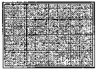
Adjust the size and shift (position) of the picture on each projector screen so that the picture is displayed correctly as one projection wall picture.

1 Connect a signal generator instead of the signal input source of the system, and display a hatch pattern.

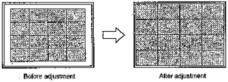


2 Display the enlarged test pattern for adjustment.

Enlarged hatch pattern on 16 screens



3 Perform the centering and size adjustments so that the picture on every projector screen is displayed with the same center position and the same size.
Release the blanking, and adjust the size and shift (position) of the picture with the RGB SIZE and RGB SHIFT keys so that the edge of the picture fits the outline of the projector cabinet.

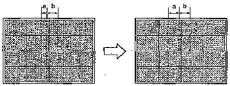


☐ indicates the screen on single projector screen.

Adjusting the Projection Wall Screen (Centering and Size)

4 Expand the vertical and horizontal size of the picture gradually on all the projectors simultaneously until the end of the picture on one projector connects to the end of the picture on the adjacent projector correctly.
In case of the hatch pattern, adjust the size so that length (a) and (b) in the illustration are equal.

Enlarged hatch pattern on 16 screens



Before adjustment: The length (a) and (b) are different.

After adjustment: The length (a) and (b) are the same.

When you use the magnifying device with which the connecting point of the picture is previously known

You can adjust each projector directly to the final picture size with the RGB SIZE and RGB SHIFT keys in step **3**. In this case, skip step **4**.

5 Finely adjust the connecting point of the picture on each projector.
If the hatch pattern does not connect correctly on the projection wall screen due to slight difference of the centering and the size of the picture on each projector, finely adjust the difference using the RGB SIZE and RGB SHIFT keys. If the hatch pattern does not connect due to linearity unbalance or other registration unbalance, readjust the registration.

6 Adjust the blanking.
Adjust the blanking to avoid the excess part of the picture reflecting. Set the blanking to about 5 mm outside the outline of the projector cabinet.

7 Press the MEMORY key to save the adjustment data.

8 Repeat the projection wall screen adjustment for other input sources and other enlarged patterns.
The projection wall screen adjustments (RGB SIZE, RGB SHIFT) and the blanking adjustment should be performed each time the input signal frequency or the input terminal in use (Input A, B or VIDEO) is changed. Enlarge the test pattern appropriately and repeat steps **3** to **6**.

If color difference is noticeable, perform the registration adjustments again.

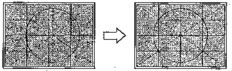
The projection wall screen adjustment is completed.

Note

If the projection wall picture is off-centered after the adjustment described above, basically adjust the center on the magnifying device or the input source equipment.

The center is shifted to the right.

Adjust the center by shifting the position of the picture to be input to the magnifying device.



Example of a projection wall screen using 16 projectors.

If there is an overlapped portion among the pictures on each projector, you can shift the picture using the RGB SHIFT key. Shift adjustment is not possible if there is no overlapped portion among the pictures.

Memory Architecture

The adjustment data are saved under various conditions as follows:

	Contents	Data source	How to save the data
Channel memory	Picture control (CONTRAST, BRIGHT, COLOR, HUE, SHARP)	Selected input	• Turn off the projector with the remote control unit. • Switch the input with the remote control unit. • Press the MEMORY key.
Status memory	RGB SIZE, SHIFT, Blanking, Color temperature (9300/6500/3200/PRESET)	Input signal	• Turn off the projector with the remote control unit. • Switch the input with the remote control unit. • Press the MEMORY key. • Change the setting in the PAGE 2 menu
Registration memory	Registration	Registration memory number for each input signal	• Press the MEMORY key.
Color temperature memory	Bias, Gain	Color temperature setting for each input signal	• Press the MEMORY key.

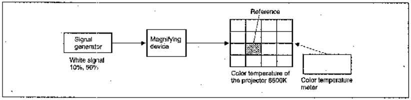
Adjusting the White Balance for the Projection Wall System Including the Magnifying Device

To obtain a natural color on a large projection wall screen, it is necessary to adjust the color on each projector so that every projector's screen looks the same.

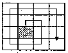
Preparation

- If the input signal level differs on each projector due to uneven output from the magnifier or distributor, adjust it before the white balance adjustment.
- Normally set the color temperature of the projector to 6500K among 9300K, 6500K, 3200K and PRESET.
- Connect the signal geneartor instead of the signal input source of the system. If there are multiple signal input sources, select the source to be used frequently.
- Reset all the projectors to get standard brightness and contrast levels using the RESET key on the remote control unit.

Assign a projector for the color temperature reference.
Display a white signal with 10% bias (black level) and 50% gain (white level) on the reference projector's screen and adjust the color temperature to 6500K using the color temperature meter such as the CS-100 colorimeter.



1 Adjust the black level.
① Output a 10% signal from the signal generator.
② Press the W/B BIAS key.
③ Cut off the red and blue signals and display only the green signal on every projector.
Adjust the projectors one by one so that the luminance of each projector looks the same as that of the reference projector.



Order of the adjustment (▨ indicates the reference projector.)

④ Add the red signal and adjust it so that the yellow looks the same on all the projectors.
⑤ Add the blue signal and adjust it so that the gray looks the same on all the projectors.

2 Adjust the white level.
① Output an 50% signal from the signal generator.
② Press the W/B GAIN key.
③ Perform the same adjustment as that for bias adjustment.

3 Repeat the bias and gain adjustments until the color on all the projectors looks the same.
Perform the bias adjustment and the gain adjustment alternately since they interact with each other.

4 Display a picture from the signal input source and check the color.
Finally, check the color of the picture that you actually intend to display. If color difference is noticeable in a bright portion (about 80IRE level) or a dark portion (about 10IRE level), readjust the bias and gain as described above.

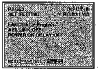
5 Press the MEMORY key to save the adjustment data.

To make a projection wall screen's brightness uniform (Linked ABL function)

If you connect the ABL LINK jacks of each projector, you can activate the ABL (Auto Brightness Limiter) on all projectors if it functions on any one projector.

1 Connect the ABL LINK jacks of each projector with an optional connecting cables with miniplugs.
For details on connection, see page 5-11.

2 Display PAGE 3 and set ABL LINK to ON for each projector.
① Press the PAGE key repeatedly until PAGE 3 appears.



PAGE3 [illegible]
SET SETTING [illegible]
LANGUAGE:English
ABL LINK:OFF
POWER ON DELAY:OFF
[illegible]

② Press the ▲ or ▼ key to make ABL LINK green.

③ Press the ◀ or ▶ key to select ON.

Adjusting the Picture Quality

Perform this adjustment only when the contrast or brightness should be adjusted in the following cases.

When the projection wall screen is too bright for the surroundings:
Reduce the contrast.
When black is too strong due to the input signal: Reduce the brightness.

The adjustment of the projection wall screen is all completed.

Adjusting the White Balance for an Individual Projector

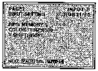
The color temperatures are preset at the factory to 9300K, 6500K and 3200K. However, you can change these levels or set a color temperature other than the factory-preset levels, and save it in the memory.

Adjust the white balance of the projector using a reference color monitor as follows:

Setting the White Balance

Preparation

1. Display the same input signal on the projector and the color monitor.
2. Press the PAGE key repeatedly until PAGE 2 appears.



3. Press the ▲ or ▼ key to make COLOR TEMP green.
4. Press the ◀ or ▶ key to select 9300, 6500 or 3200, the nearest color temperature to that of the color monitor or the desired one.
   Normally set to 6500.
5. Press the MEMORY key to save the adjustment data.

Adjusting the White Balance for an Individual Projector

Adjusting the black level

1. Press the W/B BIAS key.
2. Press the ADJ R, G or B key to select the color to be adjusted.
   When selecting the color, pay attention to the black part of the picture displayed on the screen and note which color stands out compared to that of the monitor.
3. Press the ◀ and ▶ keys so that the brightness and color of the black part in the picture look the same as those of the monitor.
   If the brightness does not look the same as that of the monitor, adjust the other colors by pressing the ADJ R, G or B key.
4. Press the MEMORY key to save the adjustment data.

Adjusting the white level

1. Press the W/B GAIN key.
2. Press the ADJ R, G or B key to select the color to be adjusted.
   When selecting the color, pay attention to the white part of the picture displayed on the screen and note which color stands out compared to that of the monitor.
3. Press the ◀ and ▶ keys so that the brightness and color of the white part in the picture look the same as those of the monitor.
   If the brightness does not look the same as that of the monitor, adjust the other colors by pressing the ADJ R, G or B key.
4. Press the MEMORY key to save the adjustment data.

Repeat steps for the black and white levels above until the black and white colors become uniform with those of the monitor.

External Communication

You can control the projector from a computer by connecting it via the RS-422 terminal.

Communication format

Baud rate	19200 bps
Data bit	8 bits
Parity	odd
Stop bit	1 bit

Commands

The main commands are as follows:

- Power on/off
- Picture muting
- Picture control
- Input select, etc.

For details, refer to the RS-422 interface manual.
The external communication is also possible using the SIRCS signal via the CONTROL S jacks.

Resetting the Data

There are three possibilities to reset the data, the serviceman data reset, factory data reset and initial data reset.

Serviceman data reset
Resets to the previously saved data (the data before the adjustment).

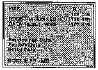
Factory data reset
Resets to the factory preset level.

Initial data reset
Resets to the initial data (no adjustment data).

How to Reset the Data

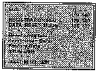
1 Select the adjustment mode to be reset.

2 Press the ◀ and ▶ keys simultaneously, or press the RESET key.
The following display appears.



SIZE
REGISTRATION RED
DATA RESET MODE
Serviceman Data
Factory Data
Initial Data

3 Press the ▲ or ▼ key to select "Serviceman data," "Factory data" or "Initial data."
Example: To reset the red size adjustment data to the factory preset level



SIZE
REGISTRATION RED
DATA RESET MODE
Reset complete
Serviceman Data
Factory Data
Initial Data

4 Press the ▶ key.
The data will be reset to the factory preset level.

To cancel the data reset
Press the ◀ key in step 4.

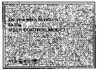
For reference — Mode and data reset correspondence

Mode	Data to be reset
RGB Size	H-size and V-size
RGB Shift	H-shift and V-shift
G-centering	Centering data for all colors
R-centering	Not applicable
B-centering	Not applicable
Size, Linearity, Wave, Skew Bow, Keystone, Pincushion Wing	All the registration data for the selected color
Blanking	RIGHT/LEFT/TOP/BOTTOM side blanking data
Gain, Bias	All the Bias and Gain data for all colors at the current color temperature

Activating the Protection on the Remote Control Unit

When you turn off the projector with the remote control unit, the adjustment keys become inoperable in order to prevent the users from accidentally changing the registration adjustments.
It is also possible to make the keys inoperable while the power is on in the following way.

1 Hold down the NORMAL key for at least 3 seconds.



Do you wish to return
to the
USER CONTROL MODE?

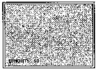
YES:[illegible] NO:[illegible]

2 Press the ▲ (YES) key.
The adjustment keys are now inoperable.

Adjusting the Picture

You can adjust the picture for each projector for your preference. The adjusted data can be saved in the memory.

1 Adjust with the PICTURE CONTROL +/– keys.



BRIGHT 50

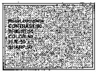
CONTRAST	picture contrast
BRIGHT	brightness
COLOR	color intensity
HUE	hue
SHARP	sharpness

The adjustment values are indicated by 0, 1, 2 ... 99, 100.

2 When the adjustment is completed, press the MEMORY key.

To restore the factory preset levels

Press the RESET key.
The factory preset levels are displayed on the screen.



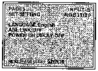
Reset complete
CONTRAST:50
BRIGHT:50
COLOR:50
HUE:50
SHARP:50

Note
- The COLOR, SHARP and HUE keys do not function on the pictures input from the RGB IN connectors.
- The HUE and COLOR keys do not function if the input signal is black and white.
- The HUE key does not function with the PAL or SECAM color source.

Using the Power On Delay Function

The projector can be turned on sequentially one by one in the order of its ID (index) number.

1 Press the PAGE key repeatedly until PAGE 3 appears.



PAGE3 INPUT-B
SET SETTING [illegible]

LANGUAGE:English
ABL LINK:OFF
POWER ON DELAY:OFF

[illegible]

2 Press the ▲ or ▼ key to select POWER ON DELAY.

3 Press the ◀ or ▶ key to select ON.
The projector enters standby mode when you press the MAIN POWER switch and turns on after the delay time when you press the POWER ON key on the remote control unit.

To deactivate the power on delay function
Select OFF in step **3** above.

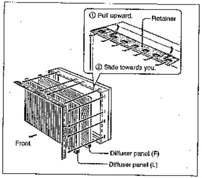
Delay time
The projector will be turned on a certain time after you pressed the POWER ON key on the remote control unit.
The delay time for each projector is as follows:

Delay time (seconds) = 1 sec. × lower two digits of the index number

ex. ID 012: 1 × 12 = 12 sec.
ID 120: 1 × 20 = 20 sec.

Replacing the Screen

When the VPS-411RF screen is used, replace the screen as follows.


① Pull upward.
Retainer
② Slide towards you.
Front
Diffuser panel (F)
Diffuser panel (L)

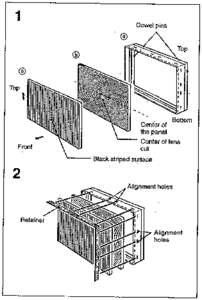
1 Remove the screen from the unit. *(See page 5-3.)*

2 Unlock the eight retainers.

Note
Be careful not to apply excessive force to the retainer, otherwise it may deform.

3 Remove the diffuser panel to be changed.

To attach the diffuser panels


1
Dowel pins
ⓐ
ⓑ
ⓒ
Top
Top
Bottom
Center of the panel
Center of lens cut
Black striped surface
Front
2
Alignment holes
Retainer
Alignment holes

1 Assemble the screen frame, the diffuser panel (F), and the diffuser panel (L) in the order as illustrated.
When assembling, pay attention to the following:
ⓐ **Screen frame:** The dowel pins should be toward the top.
ⓑ **Diffuser panel (F):** The side with circular tracks faces the diffuser panel (L). The center of the lens cut should be toward the bottom.
ⓒ **Diffuser panel (L):** The black striped surface should face the front.

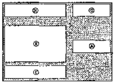
Note
When assembling, first place the screen frame on the floor, then lay the diffuser panels (F) and (L) in order.

2 Attach the eight retainers to secure the diffuser panels.
First insert the retainer hooks into the alignment holes, then into the other holes.

CAUTION
When carrying the diffuser panel (L), make sure to hold it by the longer sides, otherwise it might break.

List of the Messages

Use the list below to check the meaning of the messages displayed on the screen.
The list is divided into sections depending on the location which the message appears. Check the location first, then refer to the alphabet for the section to find the message.



Ⓓ, Ⓕ, Ⓖ and Ⓘ will appear all over the screen.

A Caution, Message

• Not applicable	• The key is not applicable in the current mode.
• PIC MUTING	• Picture muting mode is on.
• NO INPUT	• No input signal

B PIC CONTROL data

• CONTRAST: xx	• Contrast
• BRIGHT: xx	• Brightness
• COLOR: xx	• color
• HUE: xx	• Hue
• SHARP: xx	• Sharpness
• Reset complete	• Resets the PIC CONTROL data.

C Input information, Index number, Selected adjustment color

• VIDEO	• Input from VIDEO on optional video input board
• S-VIDEO	• Input from Y/C on optional video input board
• RGB	• Input from RGB
• INPUT-A	• Input from 15K RGB IN on optional video input board
• INPUT-B	• Input from 31K RGB IN
• RGB31(15)/60(50)	• 31K (15K) RGB signal with 60 (50) Hz
• NTSC3.58	• $NTSC_{3.58}$ input signal
• NTNS4.43	• $NTSC_{4.43}$ input signal
• PAL	• PAL input signal
• SECAM	• SECAM input signal
• Y_{R-Y} $_{B-Y}$ 15/60(50) *	• Analog color difference signal
• MONO	• Black and white input signal
• 000 – 999	• Index number
• R – –	• Red signal is being adjusted.
• – G –	• Green signal is being adjusted.
• – – B	• Blue signal is being adjusted.

D PAGE

Subtitle

• PICTURE CONTROL	• Picture control
• INPUT SETTING	• Input setting
• SET SETTING	• Set setting
• SET INFO	• Setting information
• SERVICE SETTING	• Serviceman setting

PAGE 1

• CONTRAST: xx	• Contrast level
• BRIGHT: xx	• Brightness level
• COLOR: xx	• Color level
• HUE: xx	• Hue level
• SHARP: xx	• Sharpness level

PAGE 2

• REGI MEMORY: x	• Registration memory number
• COLOR TEMP: 9300/6500/3200/PRESET	• Color temperature is set to 9300K/6500K/3200K/data adjustable by the service personnel
• V SHIFT: Wide/Narrow	• The adjustable range of the vertical shift is wide/narrow.

PAGE 3

• LANGUAGE: English/Francais/Deutche/Italiano/Espanol	• The on-screen display can be shown in English, French, German, Italian or Spanish.
• ABL LINK: ON/OFF	• Linked ABL on/off
• POWER ON DELAY: ON/OFF	• Power on delay on/off

PAGE 4

• CRT TIMER RED: xxxh GREEN: xxxh BLUE: xxxh	• CRT use time Red CRT use time: xxx hours Green CRT use time: xxx hours Blue CRT use time: xxx hours

PAGE 5

• ALL WHITE MODE: xx	• The duration of all white mode during a warm-up period is set to xx minutes.
• SUB BRIGHT	• Brightness uniformity adjustment level for a projection wall screen
•• UNIFORMITY: A/B/C	• Brightness uniformity adjustment level for the corners of a screen. The brightness at the corners is higher with settings A, B and C in ascending order.

E Operation

• YES: ▲	• Press ▲ key for "Yes."
• NO: ▼	• Press ▼ key for "No."
• SEL: ▶ ◀	• Press ▶ or ◀ key to select.
• SEL: ▲ ▼ ▶ ◀	• Press ▲, ▼, ▶ or ◀ key to select.
• ADJ: ▲ ▼ ▶ ◀	• Press ▲, ▼, ▶ or ◀ key to adjust.
• ADJ: ▶ ◀	• Press ▶ or ◀ key to adjust.
• ADJ: ▲ ▼	• Press ▲ or ▼ key to adjust.
• NEXT: + –	• Press + key to move the cursor to the next position. • Press – key to move the cursor to the previous position.
• NEXT: PAGE	• Press PAGE key to go to the next page.
• EXIT: PAGE	• Press PAGE key to exit the PAGE mode.

F Memory data

• Saving is complete	• Saving the memory data is completed.

* This message is not RVP-411D/411DM

List of the Messages

G Data reset

• Reset complete	• Resetting is completed.
• RGB SIZE DATA RESET MODE	• RGB input size data resetting mode
• RGB SHIFT DATA RESET MODE	• RGB input shift data resetting mode
• BLANKING DATA RESET MODE	• Blanking data resetting mode
• CENTERING ALL COLOR DATA RESET MODE	• Centering data (all color) resetting mode
• W/B GAIN&BIAS ALL COLOR DATA RESET MODE	• Gain/bias (all color) data resetting mode
• REGISTRATION (RED/GREEN/BLUE) DATA RESET MODE	• Registration (red, green or blue) data resetting mode

H Adjustment

• RGB SIZE	• RGB input size adjustment mode
• RGB SHIFT	• RGB input shift adjustment mode
• R CENT	• Red centering adjustment mode
• G CENT	• Green centering adjustment mode
• B CENT	• Blue centering adjustment mode
• SIZE	• Size adjustment mode
• MID SIZE	• Mid size adjustment mode
• 5-SIZE	• 5th size adjustment mode
• LIN (LINEARITY)	• Linearity adjustment mode
• MID LIN	• Mid linearity adjustment mode
• 6-LIN	• 6th linearity adjustment mode
• R. LIN	• Linearity adjustment mode in right section
• L. LIN	• Linearity adjustment mode in left section
• T. LIN	• Linearity adjustment mode in upper section
• B. LIN	• Linearity adjustment mode in lower section
• R. MID LIN	• Mid linearity adjustment in right section
• L. MID LIN	• Mid linearity adjustment in left section
• T. MID LIN	• Mid linearity adjustment in upper section
• B. MID LIN	• Mid linearity adjustment in lower section
• WAVE	• Wave adjustment mode
• R. WAVE	• Wave adjustment mode in right section
• L. WAVE	• Wave adjustment mode in left section
• T. WAVE	• Wave adjustment mode in upper section
• B. WAVE	• Wave adjustment mode in lower section
• R. MID WAVE	• Mid wave adjustment mode in right section
• L. MID WAVE	• Mid wave adjustment mode in left section
• T. MID WAVE	• Mid wave adjustment mode in upper section
• B. MID WAVE	• Mid wave adjustment mode in lower section
• SKEW	• Skew adjustment mode
• SUB SKEW	• Sub skew adjustment mode
• 3-SKEW	• 3rd skew adjustment mode
• BOW	• Bow adjustment mode
• SUB BOW	• Sub bow adjustment mode
• MID BOW	• Mid bow adjustment mode
• 4-BOW	• 4th bow adjustment mode

H Adjustment

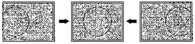
• PIN (PINCUSHION)	• Pincushion adjustment mode
• MID PIN	• Mid pincushion adjustment mode
• 4-PIN	• 4th pincushion adjustment mode
• R. PIN	• Pincushion adjustment mode in right section
• L. PIN	• Pincushion adjustment mode in left section
• T. PIN	• Pincushion adjustment mode in upper section
• B. PIN	• Pincushion adjustment mode in lower section
• R. MID PIN	• Mid pincushion adjustment mode in right section
• L. MID PIN	• Mid pincushion adjustment mode in left section
• T. MID PIN	• Mid pincushion adjustment mode in upper section
• B. MID PIN	• Mid pincushion adjustment mode in lower section
• KEY (KEYSTONE)	• Keystone adjustment mode
• MID KEY	• Mid keystone adjustment mode
• R. KEY	• Keystone adjustment mode in right section
• L. KEY	• Keystone adjustment mode in left section
• T. KEY	• Keystone adjustment mode in upper section
• B. KEY	• Keystone adjustment mode in lower section
• R. MID KEY	• Mid keystone adjustment mode in right section
• L. MID KEY	• Mid keystone adjustment mode in left section
• T. MID KEY	• Mid keystone adjustment mode in upper section
• B. MID KEY	• Mid keystone adjustment mode in lower section
• WING	• Wing adjustment mode
• SUB WING	• Sub wing adjustment mode
• R. WING	• Wing adjustment mode in right section
• L. WING	• Wing adjustment mode in left section
• T. WING	• Wing adjustment mode in upper section
• B. WING	• Wing adjustment mode in lower section
• R. MID WING	• Mid wing adjustment mode in right section
• L. MID WING	• Mid wing adjustment mode in left section
• T. MID WING	• Mid wing adjustment mode in upper section
• B. MID WING	• Mid wing adjustment mode in lower section
• BLKG RIGHT	• Blanking adjustment mode in the right position
• BLKG LEFT	• Blanking adjustment mode in the left position
• BLKG TOP	• Blanking adjustment mode in the upper position
• BLKG BOTTOM	• Blanking adjustment mode in the lower position
• BIAS	• White balance bias adjustment mode
• GAIN	• White balance gain adjustment mode

I Special mode

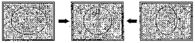
• Do you wish to enter into the SERVICEMAN CONTROL MODE?	• Do you wish to enter into the service personnel control mode?
• Do you wish to return to the USER CONTROL MODE?	• Do you wish to return to the user control mode?

Displays of the Registration Adjustments

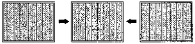
H CENT



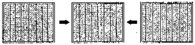
H SIZE



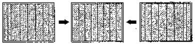
H MID SIZE



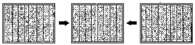
H 5-SIZE



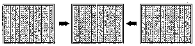
H LIN



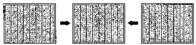
H MID LIN



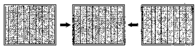
H 6-LIN



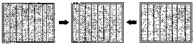
H R. LIN



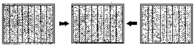
H L. LIN



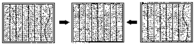
R. MID LIN



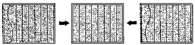
L. MID LIN



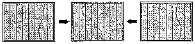
H R. WAVE



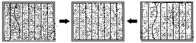
H L. WAVE



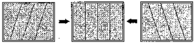
H R. MID WAVE



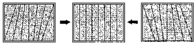
H L. MID WAVE



H SKEW



H SUB SKEW



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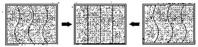

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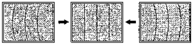

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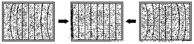

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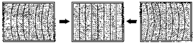

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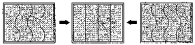

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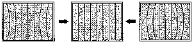

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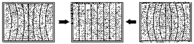

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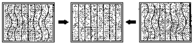

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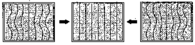

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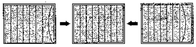

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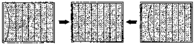

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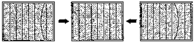

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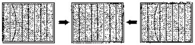

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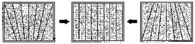

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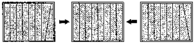

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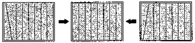

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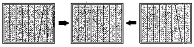

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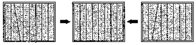

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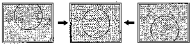
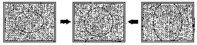


Displays of the Registration Adjustments

V SIZE



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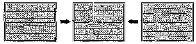
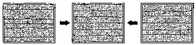


V 5-SIZE



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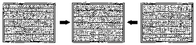

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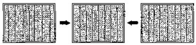

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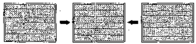

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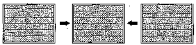

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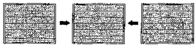

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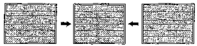
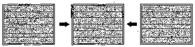


V B. MID LIN



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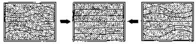

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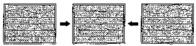

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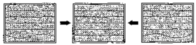

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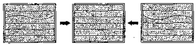
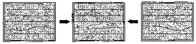


V B. MID WAVE



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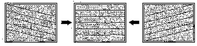

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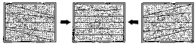

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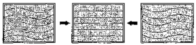

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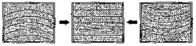

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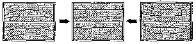

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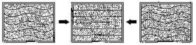
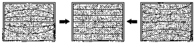
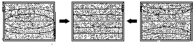


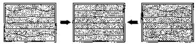
V PIN



V MID PIN



V WING



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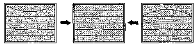

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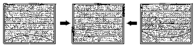

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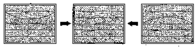

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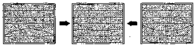
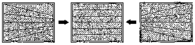
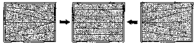


V KEY



V MID KEY



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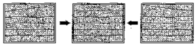

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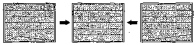
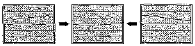


V T. MID KEY



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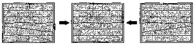
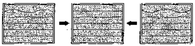
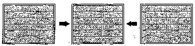


V T. WING



V B. WING



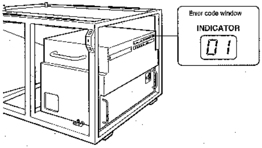
List of the Messages

V T. MID WING

V B. MID WING

Error Codes

When an operational error occurs, the power will automatically turn off and the error code indicator on the rear panel will light up. Refer to the chart below for the meanings.



Error code	Item	Meaning
01	H STOP	Horizontal polarity is not correct.
02	V STOP	Vertical polarity is not correct.
03	Ik OVER	Current in any of the R, G and B CRTs exceeds the rated output.
04	HV OVER	Abnormal high voltage
11	200V	Abnormal in the 200 V line
12	135V	Abnormal in the 135 V line
13	25V, 16V, 6V	Abnormal in the 25 V, 16 V or 6 V line
14	FAN STOP	A fan does not work.
21	D BOARD	Abnormality of the power line on the D board
22	E BOARD	Abnormality of the power line on the E board
23	A BOARD	Abnormality of the power line on the A board
31	IIC0	IIC0 bus error
32	IIC1	IIC1 bus error
91	MEMORY	Memory error

Notes

- When the error code lights up, all the current adjustment data will be cleared.
- The error code will disappear when the MAIN POWER switch is turned off.
- The error code will light up every time the power is turned on unless the operational error is recovered to normal.

1-3. RVP-511DS/511DMS OPERATING INSTRUCTIONS

SONY

3-862-174-01 (1)

Projection Wall Unit

Operating Instructions page 6 EN
Mode d'emploi page 8 F
Manual de instrucciones página 10 E
Bedienungsanleitung Seite 12 D
Istruzioni per l'uso pagina 14 I

RVP-511DJS
RVP-511DS
RVP-511DMS

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About this manual

This manual contains the "Specifications" of RVP-511DS/511DMS. As other operations are the same as RVP-411DS/411DMS/CHP-411D/411DM, please refer to the supplied Operating Instructions manual of those models.

WARNING

Owner's Record

The model and serial numbers are located on the side. Record these numbers in the space provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. ________ Serial No. ________

For the Customers in the USA

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

For the Customers in Canada

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

For the Customers in the United Kingdom

WARNING

THIS APPARATUS MUST BE EARTHED

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

Green-and-yellow	:Earth
Blue	:Neutral
Brown	:Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured green-and-yellow must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol ⏚ or coloured green or green-and-yellow. The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black. The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

Voor de klanten in Nederland

Bij dit produkt zijn batterijen geleverd.
Wanneer deze leeg zijn, moet u ze niet weggooien maar inleveren als KCA.

The socket-outlet should be installed near the equipment and be easily accessible.

Specifications

Optical characteristics

Projection system	3 picture tubes, 3 lenses, Horizontal inline system, Rear projection type
Picture tube	7-inch monochrome tubes, with coolant sealed (5.5-inch raster size)
Projection lens	F1.1/77mm
Projected picture size	50 inches measured diagonally
Luminance	RVP-511DS/511DMS with the VPS-511RF screen: ANSI (cd/m^2)[1] 190 cd/m^2 Peak 420 ft-L (1440 cd/m^2)
Light output	ANSI lumen[1] 110 lm

General

Power requirements	RVP-511DS: 120V AC, 2.8 A, 50/60Hz RVP-511DMS: 220 – 240V AC, 1.4 A, 50/60Hz
Power consumption	300 W
Operating temperature	5°C to 40°C
Operating humidity	30% to 85%
Dimensions	Approx. 1018.2 × 781 × 1236 mm (w/h/d) (40 1/8 × 30 3/4 × 48 3/4 inches)
Mass	Approx. 88 kg (194 lb)
Accessories supplied	Power cord (1) SIRCS cord 1.2 m (47 1/4 in.) (1) Operating Instructions (1)

Design and specifications are subject to change without notice.

Optional accessories

Rear screen
- VPS-511R (diffuser panels L and F without frame)
- VPS-511RF (with frame, 1.7 mm seam)
- VPS-515RF (with frame, 0.2 mm seam)

System control kit PWK-411D
(including the remote control unit RM-PJ1292)
Base stand PWR-B511A
Dual position beam PWR-P512A
Triple position beam PWR-P513A
Video input board PWB-411D
Remote control receiver RM-PJ10
RS-422 connecting cable RCC-1W2 (1.2 m)

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[1] ANSI lumen and cd/m^2 are measuring methods of American National Standard IT 7.215.

1-4. RVP-511DS/511DMS INSTALLATION MANUAL FOR DEALERS

SONY.

3-862-173-01 (1)

Projection Wall System

Installation Manual for Dealers page 14 EN
Manuel d'installation pour les revendeurs page 21 F
Manual de instalación para proveedores página 28 E
Installationsanleitung für Händler Seite 35 D
Manuale di installazione per rivenditori pagina 42 I

RVP-511DJS
RVP-511DS
RVP-511DMS

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Installation Space 17
Appropriate Viewing Area 18
Optical Distances 20

About this installation manual

This installation manual covers the above contents. As other operations are the same as RVP-411DS/411DMS/CHP-411D/411DM, please refer to the supplied Installation Manual of those models.

Specifications

Optical characteristics

Projection system	3 picture tubes, 3 lenses, Horizontal inline system, Rear projection type
Picture tube	7-inch monochrome tubes, with coolant sealed (5.5-inch raster size)
Projection lens	F1.1/77mm
Projected picture size	50 inches measured diagonally
Luminance	RVP-511DS/511DMS with the VPS-511RF screen: ANSI (cd/m^2)[1] 190 cd/m^2 Peak 420 ft-L (1440 cd/m^2)
Light output	ANSI lumen[1] 110 lm

General

Power requirements	RVP-511DS: 120V AC, 2.8 A, 50/60Hz RVP-511DMS: 220 – 240V AC, 1.4 A, 50/60Hz
Power consumption	300 W
Operating temperature	5°C to 40°C
Operating humidity	30% to 85%
Dimensions	Approx. 1018.2 × 781 × 1236 mm (w/h/d) (40$^1/_8$ × 30$^3/_4$ × 48$^3/_4$ inches)
Mass	Approx. 88 kg (194 lb)
Accessories supplied	Power cord (1) SIRCS cord 1.2 m (47$^1/_4$ in.) (1) Operating Instructions (1)

Design and specifications are subject to change without notice.

Optional accessories

Rear screen
- VPS-511R (diffuser panels L and F without frame)
- VPS-511RF (with frame, 1.7 mm seam)
- VPS-515RF (with frame, 0.2 mm seam)

System control kit PWK-411D
(including the remote control unit RM-PJ1292)
Base stand PWR-B511A
Dual position beam PWR-P512A
Triple position beam PWR-P513A
Video input board PWB-411D
Remote control receiver RM-PJ10
RS-422 connecting cable RCC-1W2 (1.2 m)

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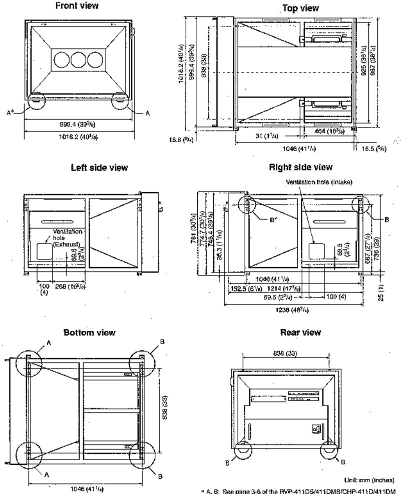
[1] ANSI lumen and cd/m^2 are measuring methods of American National Standard IT 7.215.

Dimensions

RVP-511DS/511DMS



Front view
A*
A
999.4 (39$^3/_8$)
1018.2 (40$^1/_8$)
Top view
1018.2 (40$^1/_8$)
999.4 (39$^3/_8$)
838 (33)
925 (36$^1/_2$)
987 (38$^7/_8$)
18.8 ($^3/_4$)
31 (1$^1/_4$)
464 (18$^3/_8$)
1046 (41$^1/_4$)
15.5 ($^5/_8$)
Left side view
Ventilation hole (Exhaust)
69.5 (2$^3/_4$)
100 (4)
268 (10$^5/_8$)
Right side view
Ventilation hole (Intake)
B*
B
781 (30$^3/_4$)
774.7 (30$^1/_2$)
748.4 (29$^1/_2$)
28.3 (1$^1/_8$)
69.5 (2$^3/_4$)
687 (27$^1/_8$)
736 (29)
1046 (41$^1/_4$)
152.5 (6$^1/_8$)
1214 (47$^7/_8$)
69.5 (2$^3/_4$)
100 (4)
1236 (48$^3/_4$)
25 (1)
Bottom view
A
B
A
B
838 (33)
1046 (41$^1/_4$)
Rear view
838 (33)
B
B

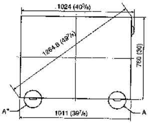
Unit: mm (inches)

* A, B: See page 3-6 of the RVP-411DS/411DMS/CHP-411D/411DM Installation manual.

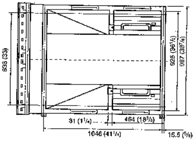
Dimensions

RVP-511DS/511DMS with the VPS-511RF Screen

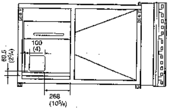
Front view


1024 (40 3/8)
1264.8 (49 7/8)
760 (30)
A*
1011 (39 7/8)
A

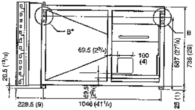
Top view


838 (33)
925 (36 1/2)
987 (38 7/8)
31 (1 1/4)
464 (18 3/8)
1046 (41 1/4)
15.5 (5/8)

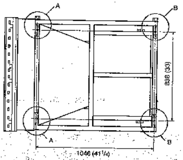
Left side view


100
(4)
69.5
(2 3/4)
268
(10 5/8)

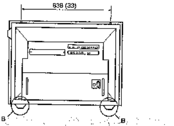
Right side view


B*
B
69.5 (2 3/4)
100
(4)
20.5 (13/16)
69.5
(2 3/4)
687 (27 7/8)
736 (28)
228.5 (9)
1046 (41 1/4)
25 (1)

Bottom view


A
B
838 (33)
A
B
1046 (41 1/4)

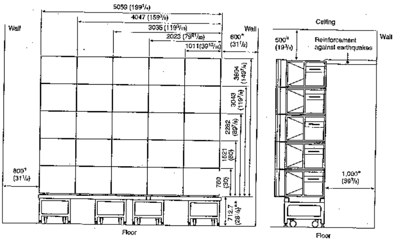
Rear view



Unit: mm (inches)

* A, B: See page 3-6 of the RVP-411DS/411DMS/CHP-411D/411DM installation manual.

Installation Space


5059 (199 1/4)
4047 (159 3/8)
3035 (119 9/16)
2023 (79 21/32)
1011 (39 13/16)
Wall
Wall
600*
(31 1/2)
800*
(31 1/2)
3604 (143 7/8)
3043 (119 7/8)
2282 (89 7/8)
1521 (60)
760 (30)
712.7 (28 1/8)**
Floor
Ceiling
500*
(19 3/4)
Reinforcement against earthquakes
Wall
1,000*
(39 3/8)
Floor

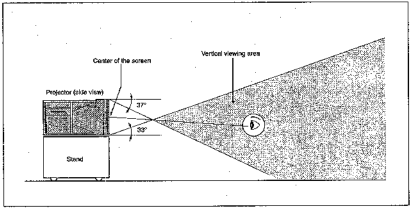
* Leave the spaces of 800 mm from the walls on both sides, of 1,000 mm from the wall on the back and of 500 mm from the ceiling, for the purpose of maintenance and adequate ventilation.
** Shows the height of a stand in standard use.

Unit: mm (inches)

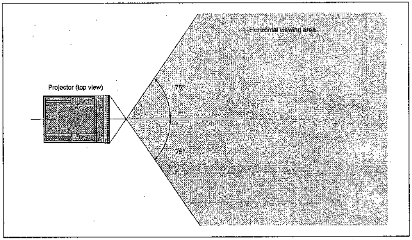
Appropriate Viewing Area

When Using One Unit

Vertical Vewing Area


Center of the screen
Vertical viewing area
Projector (side view)
37°
33°
Stand

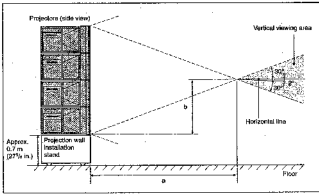
Horizontal Viewing Area


Horizontal viewing area
Projector (top view)
75°
75°

When Using Two or More Units

Example: When 16 units (4 × 4 screens) are installed approximately 0.7 m (27 ⁵/₈ in.) off the floor

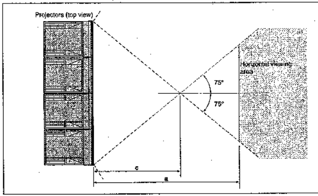
Vertical Viewing Area


Projectors (side view)
Vertical viewing area
30°
30°
2°
b
Horizontal line
Approx. 0.7 m (27⁵/₈ in.)
Projection wall installation stand
a
Floor

a (mm) = 542 × x
b (mm) = 352 × x
(x: Number of the projectors stacked up)

Exemple:
Stacking up 3 projectors
a: 542 × 3 = 1626 mm
b: 352 × 3 = 1056 mm
Stacking up 4 projectors
a: 542 × 4 = 2168 mm
b: 352 × 4 = 1408 mm

Horizontal Viewing Area


Projectors (top view)
Horizontal viewing area
75°
75°
c
a

c (mm) = 135.6 × y
(y: Number of the projectors lined up horizontally)

Example:
Lining up 3 projectors
c: 135.6 × 3 = 406.8 mm
Lining up 4 projectors
c: 135.6 × 4 = 542.4 mm

The optimum viewing area should be decided by using a longer distance **(a)** or **(c)**. When16 units (4 × 4) are installed, for example, distance **(a)** is longer than **(c)** and the optimum viewing area is as shown in gray areas in the illustrations above.

1-5. PWB-411D OPERATING INSTRUCTIONS

SONY.

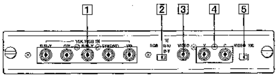
Video Input Board

3-856-104-02 (1)

PWB-411D

Operating Instructions
Mode d'emploi
Manual de Instrucciones
Bedienungsanleitung
Istruzioni d'uso

Sony Corporation © 1995 Printed in Japan



English

The video input board PWB-411D is used for the Projection Wall System RVP-411D/DM or CHP-411D/DM. Install this board to input Standard TV signals (NTSC, PAL, SECAM and NTSC$_{4.43}$), 15K analog RGB signals or analog color difference signals to the Projection Wall System.

For the customers in the USA

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generated, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

For the customers in Canada

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Location and Function of Parts

1 15K RGB IN connectors (BNC connector)
R/R-Y, G/Y, B/B-Y, SYNC/HD, VD: when you view a picture from 15K RGB or component signals, connect to the 15K RGB or component output connectors.

2 RGB/ Y/R-Y/B-Y select switch
Select the 15K RGB signals or the component (Y/R-Y/B-Y) signals.

3 VIDEO input connector (BNC connector)
Input connector for the composite video signals.

4 Y/C input connector (BNC connector)
Input connector for the Y/C separate video signals.

5 VIDEO/ Y/C select switch
Select the video or Y/C input signals.

Specifications

Inputs RGB signal
R, G, B: 0.7Vp-p±2dB, 75 ohms terminated
G signal with sync input:
1.0Vp-p±2dB, 75 ohms terminated
HD, VD: 1.0 - 4.0Vp-p, 75 ohms terminated,
sync positive/negative
SYNC: composite sync input, 1.0 - 4.0Vp-p,
75 ohms terminated, sync positive/negative

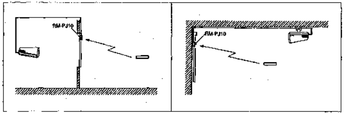
Y, R-Y, B-Y signal
Y: 1.0Vp-p±2dB, 75 ohms terminated, sync negative
R-Y, B-Y: 0.7Vp-p±2dB, 75 ohms terminated

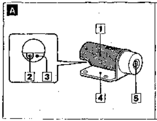
Video signal
NTSC, PAL, SECAM, NTSC$_{4.43}$
Composite video input: BNC connector, 1.0 Vp-p±2dB,
75 ohms terminated, sync negative
Y: BNC connector, 1.0 Vp-p±2dB, 75 ohms terminated,
sync negative
C: BNC connector, burst level,
0.286Vp-p±2dB, 75 ohms terminated (NTSC)
0.3Vp-p±2dB, 75 ohms terminated (PAL)

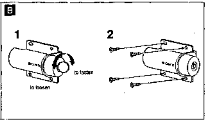
1-6. RM-PJ10 OPERATING INSTRUCTIONS

The RM-PJ10 is a remote control detector that receives signals transmitted from a Remote Commander for Sony projectors. When the projector is installed where the signal from the Commander cannot reach the built-in remote sensor, install this receiver in an appropriate location and connect it to the projector. The receiver's tube casing lets the infrared signal pass.

1-1. INSTALLATION EXAMPLES







1-2. PARTS IDENTIFICATION A

1. **Remote sensor (built-in)**
   The remote control signal transmitted from a Remote Commander passes through the casing (shaded portion in Fig. A).
2. **CONTROL S output jack (minijack)**
3. **DC IN 6V (DC input) jack**
4. **Mounting bracket**
5. **Mounting bracket fastening screw**

1-3. INSTALLATION B

1. Turn the mounting bracket fastening screw counterclockwise to loosen the bracket, move the bracket to the appropriate position and fasten it by turning the screw clockwise. (Face the SONY mark towards the Remote Commander. See Fig. D for the operable range.)
2. Secure the mounting bracket using the supplied screws.

Note
Please consult qualified Sony personnel if the supplied screws do not fit your installation location.

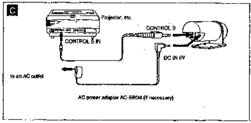
1-4. CONNECTIONS C

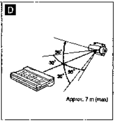
Connect the CONTROL S jack of this unit to the CONTROL S IN jack of the projector or switcher using the supplied remote control cable.

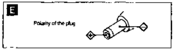
Power source
The power source for this unit differs depending on the projector or switcher to be connected. Refer to the table below.

Projector/switcher	Power source
VPH-1271Q/1271QM/1251Q/ 1251QM PC-1271/1271M	Power is supplied from the projector/switcher (through the CONTROL S jack)
VPH-1270Q/1270QM RVP-400Q/400QM/6000Q/ 6000QM PC-1270/1270M	Connect the unit to an AC power source using the AC-E60M AC power adaptor (not supplied).

Note
The supplied remote control cable is equipped with stereo miniplugs. Be sure to use it when the power of the unit is supplied through the projector/switcher.







Precautions

- The remote control may not function if there are obstructions between the Commander and the unit.
- The remote control range is limited. The shorter the distance between the Commander and the unit, the wider the angle within which the Commander can control the projector.
- The polarity of the plug to be connected to the DC IN 6 V jack should be as shown in Fig. E. Use only the AC-E60M AC power adaptor (not supplied). Do not use any other AC power adaptor.

1-7. VPS-411RF/511RF (VPS-411R/511R) OPERATING INSTRUCTIONS

Including VPS-411R/511R* (Not service object)

SONY

3-861-281-01 (1)

Rear Screen

Operating instructions EN
Mode d'emploi F
Manual de instrucciones ES
Bedienungsanleitung D
Istruzioni d'uso I

VPS-411RF/VPS-511RF

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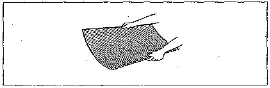
English

Features

The VPS-411RF/VPS-511RF rear screen is exclusively designed for use with the RVP-411DS/411DMS or RVP-511DS/511DMS projection wall unit, or the CHP-411D/411DM projection wall chassis.
The VPS-411RF/VPS-511RF consist of a screen frame, diffuser panel F (fresnel screen) and diffuser panel L (lenticular screen).
The VPS-411RF is a 41-inch screen, and the VPS-511RF is a 50-inch screen. Although the sizes are different, the mounting and disassembling procedures are the same for both.

Precautions

- Be careful not to scrape or scratch the diffuser panels, since they are delicate.
- Avoid using or storing the diffuser panels in hot and/or damp locations.
- When carrying the diffuser panel L, make sure to hold it by the longer sides. Otherwise it might break.



Specifications

Dimensions	VPS-411RF:	Approx. 823 × 620 × 87.1 mm (w/h/d) (32 1/2 × 24 1/2 × 3 1/2 inches)
	VPS-511RF:	Approx. 1,011 × 760 × 87.1 mm (w/h/d) (39 7/8 × 30 × 3 1/2 inches)
Mass	VPS-411RF:	Approx. 6.2 kg (13 lb 11 oz)
	VPS-511RF:	Approx. 7.9 kg (17 lb 7 oz)

Design and specifications are subject to change without notice.

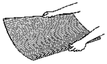
Features

The VPS-411R/VPS-511R rear screen is exclusively designed for use with the RVP-411DS/411DMS or RVP-511DS/511DMS projection wall unit, or the CHP-411D/411DM projection wall chassis.
The VPS-411R/VPS-511R consist of a diffuser panel F (fresnel screen) and diffuser panel L (lenticular screen). To mount the diffuser panels on the projector, use the screen frame supplied with Sony VPS-411RF/VPS-511RF rear screen.

The VPS-411R is a 41-inch screen, and the VPS-511R is a 50-inch screen. Although the sizes are different, the mounting and disassembling procedures are the same for both.

Precautions

- Be careful not to scrape or scratch the diffuser panels, since they are delicate.
- Avoid using or storing the diffuser panels in hot and/or damp locations.
- When carrying the diffuser panel L, make sure to hold it by the longer sides. Otherwise it might break.



Specifications

VPS-411R

Dimensions	Diffuser panel F: Approx. 822.4 × 619.4 × 2.0 mm (w/h/t) (32 1/2 × 24 1/2 × 3/32 inches) Diffuser panel L: Approx. 822.4 × 619.4 × 1.0 mm (w/h/t) (32 1/2 × 24 1/2 × 1/16 inches)
Mass	Diffuser panel F: Approx. 1.1 kg (2 lb 7 oz) Diffuser panel L: Approx. 0.5 kg (1 lb 2 oz) Total: Approx. 1.6 kg (3 lb 8 oz)

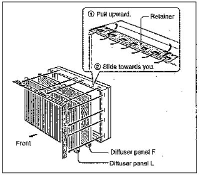
VPS-511R

Dimensions	Diffuser panel F: Approx. 1,010.4 × 759.4 × 1.5 mm (w/h/t) (39 7/8 × 30 × 1/16 inches) Diffuser panel L: Approx. 1,010.4 × 759.4 × 1.0 mm (w/h/t) (39 7/8 × 30 × 1/16 inches)
Mass	Diffuser panel F: Approx. 1.4 kg (3 lb 14 oz) Diffuser panel L: Approx. 0.8 kg (1 lb 12 oz) Total: Approx. 2.2 kg (4 lb 14 oz)

Design and specifications are subject to change without notice.

Replacing the Screen

To disassemble the screen



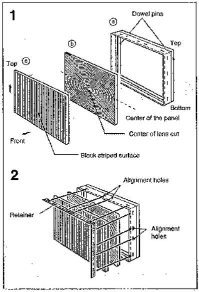
1 Remove the screen from the unit.
Refer to the installation manual of the projector.

2 Unlock the eight retainers (VPS-411R) or 12 retainers (VPS-511R).

Note
Be careful not to apply excessive force to the retainer, otherwise it may deform.

3 Remove the diffuser panel to be changed.

To attach the diffuser panels



1 Assemble the screen frame, the diffuser panel F, and the diffuser panel L in the order as illustrated. When assembling, pay attention to the following:
ⓐ **Screen frame:** The dowel pins should be toward the top.
ⓑ **Diffuser panel F:** The side with circular tracks faces the diffuser panel L. The center of the lens cut should be toward the bottom.
ⓒ **Diffuser panel L:** The black striped surface should face the front.

Note
When assembling, first place the screen frame on the floor, then lay the diffuser panels F and L in order.

2 Attach the eight retainers (VPS-411R) or 12 retainers (VPS-511R) to secure the diffuser panels. First insert the retainer hooks into the alignment holes, then into the other holes.

1-8. VPS-415RF/515RF (Not service object) OPERATING INSTRUCTIONS

SONY.

3-861-286-01 (1)

Rear Screen

Operating Instructions Page 6 EN

Mode d'emploi Page 9 F

Manual de instrucciones Página 12 ES

Bedienungsanleitung Seite 15 D

Istruzioni d'uso Pagina 18 I

VPS-415RF/VPS-515RF

© 1997 by Sony Corporation

Features

The VPS-415RF/VPS-515RF rear screen is designed for use exclusively with the RVP-411DS/411DMS or RVP-511DS/511DMS projection wall unit. As its frame is very narrow, the screen can be used to construct a projection wall screen with narrow seam.
The VPS-415RF/VPS-515RF consist of a screen frame, diffuser panel F (fresnel screen) and diffuser panel L (lenticular screen).
The VPS-415RF is a 41-inch screen, and the VPS-515RF is a 50-inch screen. Although the sizes are different, the attaching and removing procedures are the same for both.

Precautions

- Be careful not to scrape or scratch the diffuser panels, as they are delicate.
- Avoid using or storing the diffuser panels in hot and/or damp locations.
- The screen frame has a special structure for making a 0.2 mm seam. Handle it carefully.

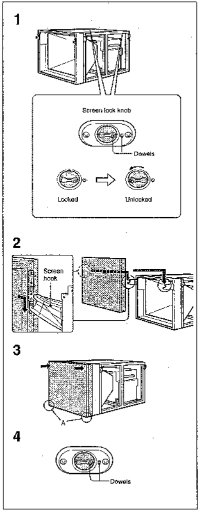
Specifications

Dimensions	VPS-415RF:	Approx. 823 × 620 × 84 mm (w/h/d) (32 1/2 × 24 1/2 × 3 3/8 inches)
	VPS-515RF:	Approx. 1,011 × 760 × 84 mm (w/h/d) (39 7/8 × 30 × 3 3/8 inches)
Mass	VPS-415RF:	Approx. 3.7 kg (8 lb 3 oz)
	VPS-515RF:	Approx. 5.2 kg (11 lb 7 oz)
Operating temperature		5°C - 40°C

Design and specifications are subject to change without notice.

Attaching to the Projection Wall Unit

Attaching the Screen



Attach the screen to the RVP-411DS/411DMS or RVP-511DS/511DMS projection wall unit.

1 Turn the two screen lock knobs at the rear of the projector while pushing them to unlock.

2 Push to protrude the two screen hooks on the front of the projector and align the two projections of both screen hooks with the holes on the reverse of the screen frame. Then push the screen down slowly.

3 Push the upper sides of the screen frame gently until it clicks to fit in.

4 Turn the screen lock knobs until the two dowels on the knob are aligned to lock the screen.

CAUTION
- Do not hold the screen hooks on the cabinet when stacking the projectors at a high place. If do so, the screen hooks may break and you may fall and injure yourself.
- Do not pull the lower part of the screen frame (around A) forcibly after it is fitted. If do so, the screen hooks may break and the screen frame cannot be locked.

1-9. PWR-B411A/B511A, PWR-P412A/P512A, PWR-P413A/P513A (Not service object) MOUNTING INSTRUCTION

SONY.

3-861-280-01 (1)

Base Stand

PWR-B411A/PWR-B511A

Dual Position Beam

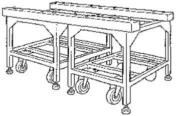
PWR-P412A/PWR-P512A

Triple Position Beam

PWR-P413A/PWR-P513A

Mounting Instructions

This manual explains how to mount the base stand and position beams which hold the Sony RVP-411DS/411DMS or RVP-511DS/511DMS projection wall unit.
The illustration below shows the PWR-B411A base stand with the PWR-P412A dual position beam.

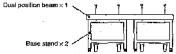
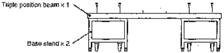
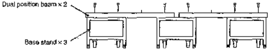
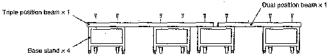
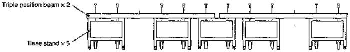
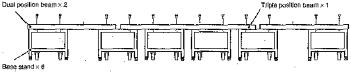


Assembled base stands and position beams

© 1997 by Sony Corporation

Number of Base Stands and Position Beams

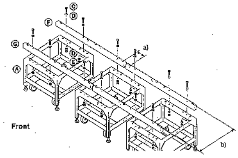
The required numbers of the base stands and position beams differ depending on the number of projectors in a horizontal row. The joint points also differ. Check the following table.

Projector	Required number of base stands and position beams, and their joint points
2 projectors	 Dual position beam × 1 Base stand × 2
3 projectors	 Triple position beam × 1 Base stand × 2
4 projectors	 Dual position beam × 2 Base stand × 3
5 projectors	 Triple position beam × 1 Dual position beam × 1 Base stand × 4
6 projectors	 Triple position beam × 2 Base stand × 5
7 projectors	 Dual position beam × 2 Triple position beam × 1 Base stand × 6

Mounting

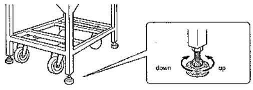
The three PWR-B411A base stands with two sets of PWR-P412A position beams are used for illustration purposes.
Be careful to follow the directions for the base stand and position beam.

1 Attach the position beams to the base stands.
Fix the front position beam Ⓖ and the rear position beam Ⓕ to each base stand Ⓐ with four bolts Ⓒ, four nuts Ⓔ and eight washers Ⓓ.
Check the joint points with the table on the previous page.

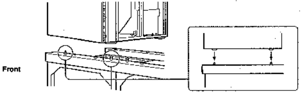


Note
When the base stands are not used, set pitches a) and b) between the position beams as follows:
a): 174 mm (6 $^{27}/_{32}$ inches)
b): 854 mm (33 $^{5}/_{8}$ inches) for PWR-P412A/P413A
1046 mm (41 $^{3}/_{16}$ inches) for PWR-P512A/P513A

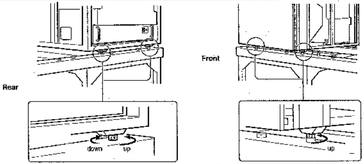
2 Adjust the height of the adjusters on the base stand.
Turn the adjusters using the supplied wrench until the position beams are installed horizontally.



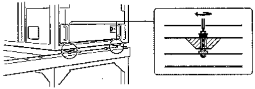
3 Place all the projectors for the bottom row on the position beams.
Insert the dowel pins on the front position beam into the front legs of the projector.
Then check whether the projectors are level.



4 If the projectors are not level, adjust them horizontally.
Adjust the nuts on the rear position beam with the supplied wrench until the projector is level with the highest one. If adjusting the rear nuts is not sufficient, adjust the nuts on the dowel pins of the front position beam.



5 Fix the projector to the position beams.
Turn the screws on the projector (2 on the front, and 2 on the rear) and fix the projector to the position beams.



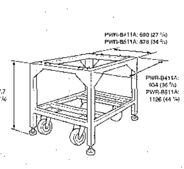
Note
Do not turn the horizontal adjustment nuts after the projector is fixed to the position beams. If the horizontal adjustment is necessary, first loosen the fixing screws.

Parts List

■ PWR-B411A/PWR-B511A

Ⓐ Base stand

Unit: mm (inches)


PWR-B411A: 690 (27 ⅛)
PWR-B511A: 878 (34 ⅝)
PWR-B411A: 934 (36 ¾)
PWR-B511A: 1126 (44 ⅜)
597.7 (23 ½)

PWR-B411A: 44 kg (97 lb)
PWR-B511A: 50 kg (110 lb 7 oz)

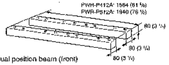
Ⓑ	Wrench	1	
Ⓒ	Hexagonal head bolts	4	
Ⓓ	Washers	8	
Ⓔ	Hexagonal nuts	4	

Note

Use the supplied wrench Ⓑ for adjustment. Do not use it for mountintg as adequate torque cannot be applied with the supplied wrench. If you use it for mounting, the wrench may be bent.

■ PWR-P412A/P512A

Ⓕ Dual position beam (rear)

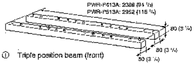

PWR-P412A: 1564 (61 ⅝)
PWR-P512A: 1940 (76 ⅜)
80 (3 ⅛)
80 (3 ⅛)
80 (3 ⅛)

Ⓖ Dual position beam (front)

PWR-P412A: 20 kg (44 lb 2 oz)
PWR-P512A: 24 kg (52 lb 15 oz)

■ PWR-P413A/P513A

Ⓗ Triple position beam (rear)


PWR-P413A: 2398 (94 ⅜)
PWR-P513A: 2952 (116 ¼)
80 (3 ⅛)
80 (3 ⅛)
80 (3 ⅛)

Ⓘ Triple position beam (front)

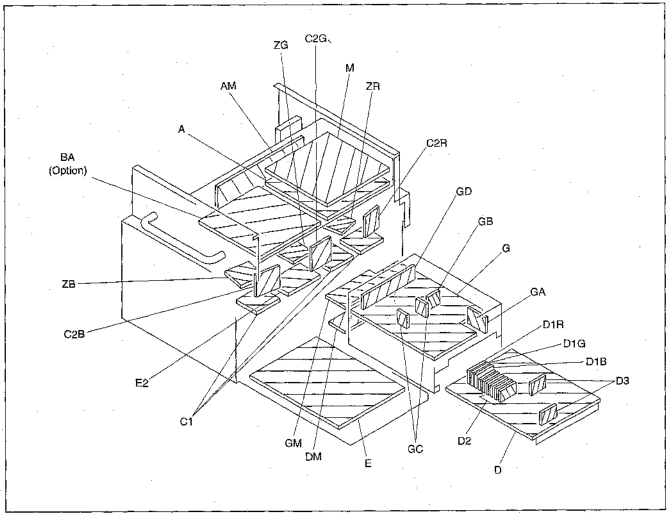
PWR-P413A: 30 kg (66 lb 2 oz)
PWR-P513A: 36 kg (79 lb 9 oz)

The usable base stand and position beams are different depending on the projector models.

Projector	Base stand	Dual position beam	Triple position beam
RVP-411DJS RVP-411DS RVP-411DMS	PWR-B411A	PWR-P412A	PWR-P413A
RVP-511DJS RVP-511DS RVP-511DMS	PWR-B511A	PWR-P512A	PWR-P513A

SECTION 2
SERVICE INFORMATIONS

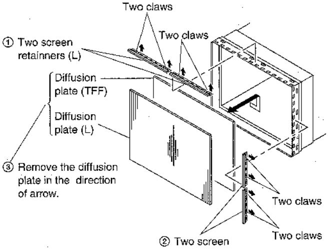
2-1. CIRCUIT BOARDS LOCATION

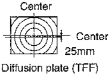

ZG
C2G
M
AM
ZR
A
C2R
BA
(Option)
GD
GB
G
ZB
GA
D1R
C2B
D1G
D1B
D3
E2
C1
D2
GM
DM
E
GC
D

2-2. DISASSEMBLY

2-2-1. DIFFUSION PLATE REMOVAL

- 41 inch

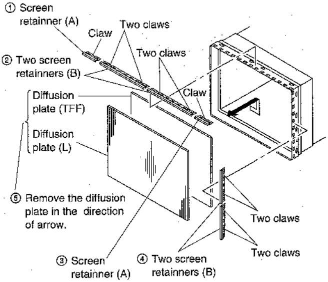

Two claws
Two claws
① Two screen retainners (L)
Diffusion plate (TFF)
Diffusion plate (L)
③ Remove the diffusion plate in the direction of arrow.
Two claws
Two claws
② Two screen retainners (S)


Center
Center
25mm

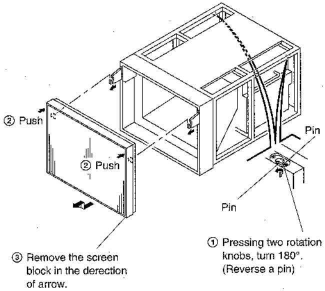
Diffusion plate (TFF)

* Take heed of each center of circle and diffusion plate (TFF) are tilted.

- 50 inch

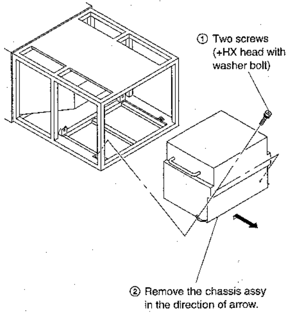

① Screen retainner (A)
Claw
Two claws
② Two screen retainners (B)
Two claws
Claw
Diffusion plate (TFF)
Diffusion plate (L)
⑤ Remove the diffusion plate in the direction of arrow.
Two claws
Two claws
③ Screen retainner (A)
④ Two screen retainners (B)

2-2-2. SCREEN BLOCK REMOVAL

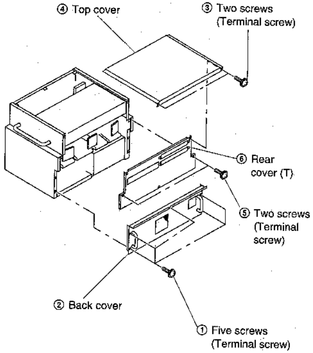

② Push
② Push
Pin
Pin
③ Remove the screen block in the derection of arrow.
① Pressing two rotation knobs, turn 180°. (Reverse a pin)

Note: After confirming that the top of screen came out to the front by ②, proceed to the operation of ③.
Pulling the bottom of screen with the screen holder hook in retract position will damage the screen holder hook.

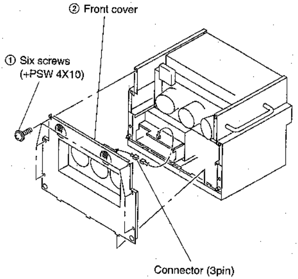
2-2-3. CHASSIS ASSY REMOVAL


① Two screws (+HX head with washer bolt)
② Remove the chassis assy in the direction of arrow.

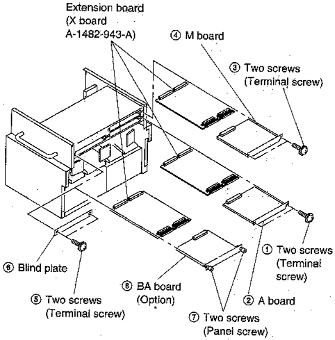
2-2-4. TOP AND REAR COVERS REMOVAL


④ Top cover
③ Two screws
(Terminal screw)
⑥ Rear
cover (T)
⑤ Two screws
(Terminal
screw)
② Back cover
① Five screws
(Terminal screw)

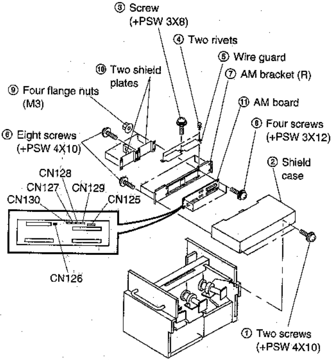
2-2-5. FRONT COVER REMOVAL


② Front cover
① Six screws
(+PSW 4X10)
Connector (3pin)

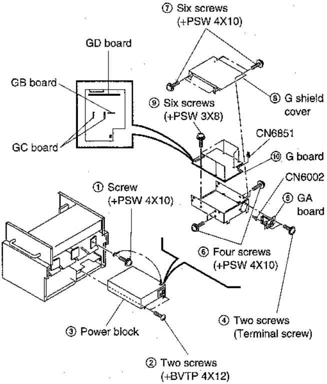
2-2-6. A, M AND BA BOARDS REMOVAL AND EXTENSION BOARD


Extension board
(X board
A-1482-943-A)
④ M board
③ Two screws
(Terminal screw)
① Two screws
(Terminal
screw)
⑥ Blind plate
⑧ BA board
(Option)
② A board
⑤ Two screws
(Terminal screw)
⑦ Two screws
(Panel screw)

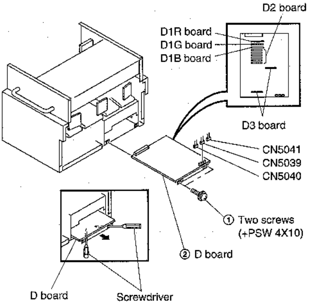
2-2-7. AM BOARD REMOVAL


③ Screw
(+PSW 3X8)
④ Two rivets
⑤ Wire guard
⑩ Two shield
plates
⑦ AM bracket (R)
⑨ Four flange nuts
(M3)
⑪ AM board
⑧ Four screws
(+PSW 3X12)
⑥ Eight screws
(+PSW 4X10)
② Shield
case
CN128
CN127
CN129
CN130
CN125
CN126
① Two screws
(+PSW 4X10)

2-2-8. G BOARD REMOVAL


⑦ Six screws
(+PSW 4X10)
GD board
GB board
GC board
⑧ G shield cover
⑨ Six screws
(+PSW 3X8)
CN6851
⑩ G board
CN6002
① Screw
(+PSW 4X10)
⑤ GA board
⑥ Four screws
(+PSW 4X10)
④ Two screws
(Terminal screw)
③ Power block
② Two screws
(+BVTP 4X12)

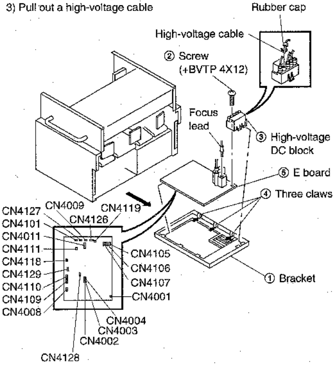
2-2-9. D BOARD REMOVAL


D2 board
D1R board
D1G board
D1B board
D3 board
CN5041
CN5039
CN5040
① Two screws
(+PSW 4X10)
② D board
D board
Screwdriver

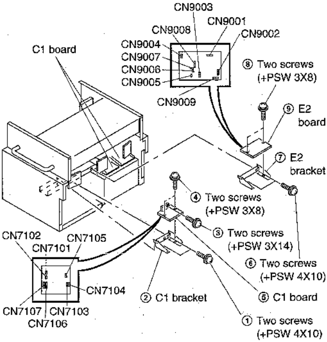
2-2-10. E BOARD REMOVAL

High-voltage cable removal

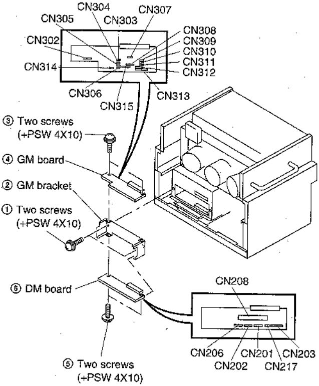
1) Shift rubber cap
2) Pressing high-voltage cable, turn 90°
3) Pull out a high-voltage cable


Rubber cap
High-voltage cable
② Screw
(+BVTP 4X12)
Focus lead
③ High-voltage DC block
⑤ E board
④ Three claws
① Bracket
CN4127
CN4009
CN4119
CN4126
CN4101
CN4011
CN4111
CN4118
CN4129
CN4110
CN4109
CN4008
CN4105
CN4106
CN4107
CN4001
CN4004
CN4003
CN4002
CN4128

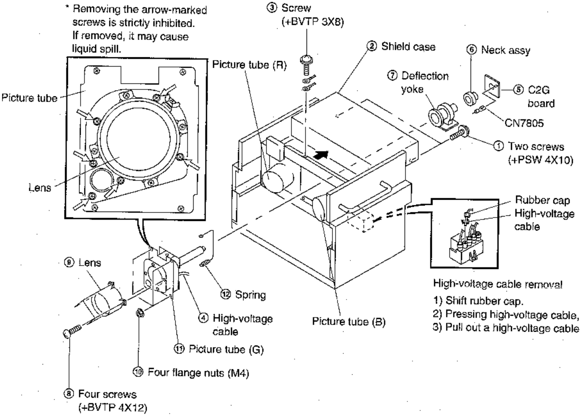
2-2-11. C1 AND E2 BOARDS REMOVAL


CN9003
CN9001
CN9008
CN9002
C1 board
CN9004
CN9007
CN9006
CN9005
CN9009
⑧ Two screws
(+PSW 3X8)
⑨ E2 board
⑦ E2 bracket
④ Two screws
(+PSW 3X8)
③ Two screws
(+PSW 3X14)
⑥ Two screws
(+PSW 4X10)
⑤ C1 board
② C1 bracket
① Two screws
(+PSW 4X10)
CN7102
CN7105
CN7101
CN7104
CN7107
CN7103
CN7106

2-2-12. GM AND DM BOARDS REMOVAL


CN304
CN307
CN305
CN303
CN302
CN308
CN309
CN310
CN311
CN312
CN314
CN306
CN315
CN313
③ Two screws (+PSW 4X10)
④ GM board
② GM bracket
① Two screws (+PSW 4X10)
⑥ DM board
CN208
CN206
CN201
CN203
CN202
CN217
⑤ Two screws (+PSW 4X10)

2-2-13. PICTURE TUBE REMOVAL


③ Screw (+BVTP 3X8)
② Shield case
⑥ Neck assy
Picture tube (R)
⑦ Deflection yoke
⑤ C2G board
Picture tube
CN7805
① Two screws (+PSW 4X10)
Lens
Rubber cap
High-voltage cable
⑨ Lens
⑫ Spring
④ High-voltage cable
Picture tube (B)
⑪ Picture tube (G)
⑩ Four flange nuts (M4)
⑧ Four screws (+BVTP 4X12)

* Removing the arrow-marked screws is strictly inhibited. If removed, it may cause liquid spill.

High-voltage cable removal

1) Shift rubber cap.
2) Pressing high-voltage cable, turn 90°.
3) Pull out a high-voltage cable.

SECTION 3
SET-UP ADJUSTMENT

3-1. PREPARATION

(1) Condition for AC input voltage
For J ... 100 VAC ± 2%
For U/C ... 120 VAC ± 2%
For AEP ... 220 VAC ± 2%
The frequency shall be 50 Hz and the distortion factor shall be 3% max. in either of the above cases.

* The capacity of a slidac, when it is used, shall be 1.5kW or more.

(2) Unless otherwise specified, use the NTSC video signal as an input signal.

(3) Mount the video option board PWB-411D (BA board) on the AM board CN123.

(4) Keep pressing $\boxed{\text{TEST}}$ key, and press $\boxed{\Delta}$ to enter TEST mode.

Note: 1) RVP-411/511 Series are not equipped with a VIDEO input terminal, so mount a video option board PWB-411D for adjustment and inspection when a VIDEO signal is input.

2) Using the screen VPS-411RF for RVP-411DS/411DMS, or screen VPS-511RF for RVP-511DS/511DMS, perform adjustment and inspection.

3-2. ADJUSTMENT I

3-2-1. Rough Adjustment of Focus

1. Input a monoscope signal to VIDEO.
2. Turn on POWER.
3. Set INPUT SELECT in the VIDEO position.
4. Cut off RED and BLUE to show single GREEN.
5. Adjust the electric focus (G4) of GREEN so as to roughly focus the screen.
6. Adjust the GREEN lens to roughly focus the screen.
7. Let single RED appear, and adjust the RED focus in the same manner as 5 to 8.
8. Let single BLUE appear, and adjust the BLUE focus in the same manner as 5 to 8.

3-2-2. Preset Adjustment of Center Size

1. Receive a monoscope signal.
2. Cut off RED and GREEN in the G CENT mode, and let the GREEN center coincide with the screen center.
3. Cut off BLUE in the R CENT mode, and let the RED center coincide with the GREEN center.
4. Cut off GREEN in the B CENT mode, and let the BLUE center coincide with the RED center.
5. Widen the image width to the full-screen size in the SIZE [G] ADJ mode.

3-2-3. DY (Deflection Yoke) Adjustment

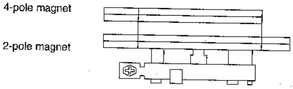
1. Press the $\boxed{\text{TEST}}$ key and select the cross hair.
2. Turn GREEN DY to align the horizontal cross hair line with the horizontal screen line, and fix it.
3. Output RED and GREEN.
4. Turn RED DY to align the horizontal line of RED with GREEN, and fix it.
5. Output RED and BLUE.
6. Turn BLUE DY to align the horizontal line of BLUE with RED, and fix it.

3-2-4. Rough Adjustment of Registration

1. Press the $\boxed{\text{TEST}}$ key and select the "diagonal."
2. Set the unit in the BLK mode, and cancel BLK at the right and left, as well as at the top and bottom. Operation is sufficient when the cross hatch signal is shown fully on the screen.
3. Adjust SIZE, LIN, KEY, BOW, SKEW (H only), and PIN, and roughly adjust the distortion of GREEN.
4. Adjust SIZE, LIN, KEY, BOW, SKEW (H only), and PIN, and align the RED registration with GREEN. (Rough adjustment)
5. Adjust SIZE, LIN, KEY, BOW, SKEW (H only), and PIN, and align the BLUE registration with RED. (Rough adjustment)
6. Press $\boxed{\text{MEMORY}}$ key.

3-2-5. 2/4 Pole Magnet Adjustment

Note: The screen distortion must be roughly adjusted before 2/4 pole adjustment.



Torque : 5.0kgf • cm

Fig.3-1

1. Press TEST key to let the cross hair of the internal signal appear.
2. Press GAIN key and maximize respective values of RGB.
3. Cut off RED and BLUE.
4. Turn the GREEN focus of the focus pack counterclockwise slightly exceeding JUST POINT so that the flare will be generated in the cross hair. When the bright point is difficult to see, adjust CONTRAST and BRT.

Note: After adjustment, return to RESET.

5. Adjust the 2-pole magnet so that the bright point will be in the center of the flare.
6. Press TEST key to produce a dot signal of the internal signal.
7. Turn the GREEN focus clockwise slightly exceeding JUST POINT so that the dot will be overfocused.
8. Adjust the 4-pole magnet so that the dot will become round.
9. Repeat operations 2 to 8 as necessary for tracking.
10. Focus correctly.
11. Repeat operations 2 to 8 for RED and BLUE as well.
12. Recenter RGB in the CENT adjustment mode.
13. Press GAIN key, and return respective values of RGB to the RESET value.
14. Press MEMORY key.

3-2-6. FOCUS Adjustment

1. Press TEST key to let the ME pattern appear. There shall be no signal. Without connecting anything to the RGB31K input, select INPUT B.
2. Cut off RED and BLUE to let single GREEN appear.
3. Turn the GREEN focus VR for focusing correctly.
4. Adjust the main lens so that the ME pattern in the center of the screen will be shown clearly.
5. Turn the GREEN focus VR again to make adjustment so that the ME pattern will be shown clearly.
6. Cut off GREEN and BLUE to let single RED appear. Adjust the lens and electric focus in order of 3 to 5 so that the RED ME pattern will be shown clearly.
7. Cut off RED and GREEN to let single BLUE appear. Adjust the lens and electric focus in order of 3 to 5 so that the BLUE ME pattern will be shown clearly.

3-3. CONFIRMATION OF RS422 OPERATION

1. Turn off POWER by means of a remote controller. (Main power should be ON.)
2. Input NTSC monoscope to the VIDEO input and the SMPTE pattern (No.22) to the 31kRGB input.
   No.22: VGA 640 x 480 (SMPTE pattern)
3. Connect the RS422 check jig to the RS422 connector.
4. Check that ID is 000.
5. Turn on POWER by means of POWER key.
6. Select the VIDEO input by means of VIDEO key to let the monoscope signal appear on the screen.
7. Input 0210000020000403 <F2> by means of the RS422 check jig.
8. Check that the input changes over to the RGB signal and the SMPTE pattern appears on the screen.
9. Operate the ID switch to let ID be "888."
10. Input 0210088820000103 <F2> by means of the RS422 check jig.
11. Check that the input changes over to VIDEO signal and the monoscope appears on the screen.
12. Operate the ID switch to let ID be "000."
13. Input 0210000020000403 <F2> by means of the RS422 check jig.
14. Check that the input changes over to the RGB signal and the SMPTE pattern appears on the screen.

RS422 check jig

Machine that is compatible with IBM-PC and can support RS232C 19.2 kbps
Required OS: MS-DOS ver.3 or later
The inspection software will be supplied by the Products Department. (3.5 FDD)

RS422 setting
Baud rate: 19200 bps
Data length: 8 bit
Parity: Odd
Stop bit: 1

Note: All those items may be omitted when registration adjustment and white balance adjustment are carried out via RS422.

3-4. REGISTRATION ADJUSTMENT

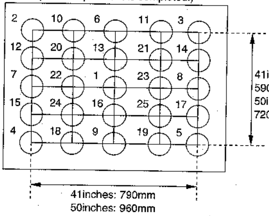
3-4-1. Adjustment of Registration Block No.1

GREEN registration adjustment

1. Input a monoscope signal to the video input.
   (U/C) (J) 525/60 Hz monoscope
   (AEP) 625/50 Hz monoscope
2. Set INPUT SELECT in the VIDEO position, and check that the monoscope screen will appear.
   Standard for monoscope screen size
   (U/C) H: 16 ± 0.1 frame V: 12 ± 0.1 frame
   (AEP) H: 15.5 ± 0.1 frame V: 11.5 ± 0.1 frame
3. Change RGB SIZE and RGB SHIFT to the standard values.
   Standard value: RGB SIZE H 127 V 32
   RGB SHIFT H 127 V 0
4. Cut off RED and BLUE to let single GREEN appear.
5. Adjust G CENTER so that the monoscope center will coincide with the screen center.
6. Adjust G SIZE and G MIDSIZE so that the monoscope will be the specified size.
7. Press the TEST key to let the hatch pattern appear.
8. Adjust SIZE, LIN, SKEW, BOW, KEY, and PIN KEY so that the registration will be within the standard.
9. Press the NORMAL key to let the monoscope appear, and check that the monoscope is the specified size. If not, repeat operations 6 to 9.

2~5 ;	41inches MAX 3.5mm 50inches MAX 4.5mm
6~25 ;	41inches MAX 2.0mm 50inches MAX 2.5mm
1 ;	41inches MAX 0.5mm 50inches MAX 0.6mm

(When adjustment is completed.)



Note: Conduct the above inspection after centering adjustment.

Fig.3-2

10. Press MEMORY key to save data in the registration No.1.

3-4-2. RED Registration Adjustment

1. Input a cross hatch signal to the video input to let the screen appear.
   The signal may be an internal diagonal pattern, VG-814, etc.
2. Let GREEN and RED appear by means of CUT OFF key.
3. Let the RED center coincide with the GREEN center by RED centering.
4. Adjust SIZE, LIN, SKEW, BOW, KEY, and PIN KEY so that the RED cross hatch will overlap with the GREEN cross hatch signal.
5. Press MEMORY key to save data in the registration No.1.

3-4-3. BLUE Registration Adjustment

1. Input a cross hatch signal to the video input to let the screen appear.
2. Let GREEN and BLUE appear by means of CUT OFF key.
3. In the same way as RED, make adjustment in order of 3. to 5. so that the BLUE cross hatch will overlap with GREEN.
4. Press MEMORY key to save data in the registration No.1.

3-4-4. Registration Data Copy

Connect the RS422 jig, and copy the registration data into the factory memory and registration data No.2 to No.8.

3-5. ADJUSTMENT II (WHITE BALANCE ADJUSTMENT)

3-5-1. G2 Fine Adjustment

1. Input the VG814 No.5 10IRE signal to the RGB input.
   No.5: NSTC double-speed gray scale (10IRE)
2. Press the GRAY key of VG-814 to utterly blacken the screen.

3. Set as follows: CONT: 80%
   BTR: 50%
   SUBBRT: 10
   Initial value: BIAS ... R 127
   G 127
   B 127
   GAIN ... R 200
   G 200
   B 200
4. Initialize BIAS GAIN.
5. Intensify IKREF RED by means of a remote controller, and stop adjustment when the screen begins to glare.
   How to enter IKREF adjustment mode:
   Keep pressing the ENTER key on PAGE5 for 5 seconds.
6. Weaken IKREF RED by means of a remote controller, and stop adjustment at the very moment when CRT is cut off.
7. Make the same adjustment for BLUE.
8. Press the GRAY key to set 10IRE.
9. Adjust IKREF GREEN to set the GREEN brightness at the specified value.
   G brightness: 2 ± 0.5 cd/m^2

3-5-2. Blue Defocus Adjustment

1. Input the VG814 No.5 10IRE signal to the RGB input. Completely focus BLUE in advance.
2. Press RESET key to reset the user controller.
   Initial value: BIAS<B> 127
3. Press BIAS key to set BIAS BLUE DATA at the initial value.
   Initial value: GAIN<B> 200
4. Press GAIN key to set GAIN BLUE DATA at the initial value.
5. Keep pressing TEST key to let the diagonal of the test pattern appear.
6. Press CUT OFF <R> and <G> key to cut off GREEN and RED.
7. Turn BLUE FOCUS VR clockwise to make adjustment so that a = b = 41 inches: 4 ± 1mm, 50 inches: 5 ± 1mm as shown in Fig.3-3.

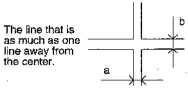


Fig.3-3

8. When there is a difference between the width of "a" and the width of "b," readjust the 4-pole magnet.

3-5-3. Color Temperature Adjustment

1. Press STATUS <ON> key to let the on-screen display appear.
2. Press PAGE key and set COLOR TEMP. at 6500K.
3. Press BIAS key to set BIAS at the initial value.
   Initial value of BIAS: BIAS R 127
   G 127
   B 127
4. Press GAIN key to set GAIN at the initial value.
   Initial value of GAIN: GAIN R 200
   G 200
   B 200
5. Press STATUS <OFF> key to let the on-screen display disappear.
6. Input 10IRE flat field signal (VG-814 No.5) to RGB.
7. Press BIAS key , and keep pressing TEST key to let the flat field signal of 10IRE be output.
8. Adjust the brightness of GREEN by means of <G> ADJ.
9. Adjust <R><B> ADJ so that the color temperature will be as specified.
10. The input signal shall be 1/36 window. (VG-814 No.25)
    No.25: NTSC double-speed window 1/36
11. Adjust GAIN <G> ADJ so that the brightness will be as specified.
12. The input signal shall be 50IRE flat field. (VG814 No.6)
13. Adjust GAIN <R><B> ADJ so that the color temperature will be as specified.
14. Repeat operations 5. to 12. for tracking.
15. Press MEMORY key to save data.
16. Press STATUS <ON> key to let the on-screen display appear.
17. Press PAGE key to set COLOR TEMP. at 9300K.
18. Repeat operations 3. to 14. to set 9300K.
19. Press PAGE key and set COLOR TEMP. at 3200K.
20. Repeat operations 3. to 14. to set 3200K.
    Standard value
    6500K
    C/O side
    G brightness: 2.0 ± 0.5 cd/m^2 (When 10IRE is input)
    Color temp.: 6500K + 8MPCD ± 5JND (When 10IRE is input)

H/L side
G brightness:41 inches 900 ± 10 cd/m^2
(When 1/36 window is input)
50 inches 450 ± 10 cd/m^2
(When 1/36 window is input)
Color temp.: 6500K + 8MPCD ± 3JND (When 50 IRE is input)

9300K
C/O side
G brightness:2.0 ± 0.5 cd/m^2 (When 10IRE is input)
Color temp.: 9300K + 8MPCD ± 5JND (When 10IRE is input)
H/L side
G brightness:41 inches 900 ± 10 cd/m^2
(When 1/36 window is input)
50 inches 450 ± 10 cd/m^2
(When 1/36 window is input)
Color temp.: 9300K + 8MPCD ± 3JND (When 50 IRE is input)

3200K
C/O side
G brightness:2.0 ± 0.5 cd/m^2 (When 10IRE is input)
Color temp.: 3200K + 8MPCD ± 5JND (When 10IRE is input)
H/L side
G brightness:41 inches 900 ± 10 cd/m^2
(When 1/36 window is input)
50 inches 450 ± 10 cd/m^2
(When 1/36 window is input)
Color temp.: 3200K + 8MPCD ± 3JND (When 50 IRE is input)

3-5-4. Color Temperature Copy

1. Connect the RS422 jig for resetting.
2. Copy the 6500K data into PRESET.
3. Copy respective color temperature data into the factory memory.

3-6. BLANKING ADJUSTMENT

3-6-1. NTSC Adjustment

1. Input an NTSC monoscope signal to the video input, set INPUT SELECT in the VIDEO position, and let it be output.
2. Adjust the monoscope center and screen size by means of RGB SIZE and SHIFT.
3. Enter the BLK adjustment mode, and set the blanking as close as to the screen frame.
4. Then make adjustment by the arrow key so that the 5-step blanking will exceed the blanking value.
5. Press the MEMORY key for saving.

3-6-2. PAL Adjustment

1. Input a PAL monoscope signal to the video input, set INPUT SELECT in the VIDEO position, and let it be output.
2. Adjust the monoscope center and screen size by means of RGB SIZE and SHIFT.
3. Enter the BLK adjustment mode, and set the blanking close to the screen frame.
4. Then make adjustment by the arrow key so that the 5-step blanking will exceed the blanking value.
5. Press the MEMORY key for saving.

3-6-3. 31K RGB Adjustment

1. Input VG-814 No.22 to the 31K RGB input, set INPUT SELECT in INPUT B position, and let it be output.
   No.22: VGA 640 x 480 (SMPTE pattern)
2. Check that V SHIFT of RGB SIZE is Wide.
3. Adjust the pattern center and screen size by means of RGB SIZE and SHIFT.
4. Enter the BLK adjustment mode, and set the blanking as close as to the screen frame.
5. Then make adjustment by the arrow key so that the 5-step blanking will exceed the blanking value.
6. Press the MEMORY key for saving.

3-6-4. NO INPUT Adjustment

1. Remove the 31K RGB input to set the unit in no-input mode.
2. Check that V SHIFT of PAGE2 is Wide.
3. Select the diagonal by means of the TEST key.
4. Adjust the pattern center and screen size by means of RGB SIZE and SHIFT.
5. Enter the BLK adjustment mode, and set the blanking close to the screen frame.
6. Then make adjustment by the arrow key so that the 5-step blanking will exceed the blanking value.
7. Press the MEMORY key for saving.

3-6-5. SECAM/NTSC443 Adjustment

1. Connect the RS422 jig.
2. Copy RGB SIZE, SHIFT, and BLK data.
   Copying contents:
   NTSC 3.58 data
      NTSC 4.43, PAL-M, MONO-525, S-NTSC 3.58, S-NTSC 4.43, S-PAL-M, S-MONO-525, RGB 15K/525, Y/R-Y/B 15K-525
   PAL data
      SECAM, MONO-625, S-PAL-B, S-SECAM, S-MONO-625, RGB 15K/625, Y/R-Y/B-Y15K/625

3-6-6. Selection of UNIFORMITY (EXCEPT RVP-411D/411DM)

1. Open PAGE 5 using the PAGE key.
2. Select the UNIFORMITY, then select either one of A, B, or C with arrow keys.
3. Press the PAGE key to exit from the PAGE screen.

Note: The video wall should be on the same lebel on all screens. "A" provides the same level as RVP-411D/411DM, and "C" is for a light place, and it may cause over-correction on a dark screen. Normally, "B" is used.

3-7. POSITIONS SET BEFORE SHIPMENT

1. PAGE MENU

	INPUT B	VIDEO	INPUT A
PAGE 1			
• CONTRAST	80%	80%	80%
• BRT	50%	50%	50%
• COLOR	—	50%	
• HUE	—	50%	
• SHAR	—	50%	
PAGE 2			
• REGI MEMORY		No.1	
• COLOR TEMP.		6500K	
• V SHIFT	Wide	Narrow	Narrow
PAGE 3			
• LANGUAGE		ENGLISH	
• ABL LINK		OFF	
• PWR ON DLY		OFF	
PAGE 4			
• CRT TIMER		0000h	
PAGE 5			
• ALL WHITE MODE		20min.	
• SUB BRT		10	
• UNIFORMITY		B (EXCEPT RVP411D/411DM)	

2. MAIN POWER SW	OFF
3. POWER	OFF
4. INPUT SELECT	B
5. RGB / Y/R-Y/B-Y	RGB
6. VIDEO / Y/C	VIDEO
7. INDEX No.	000

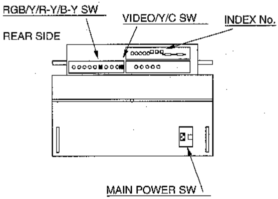


Fig.3-4

SECTION 4
SAFETY RELATED ADJUSTMENT

When the parts marked by ⧓ and ◪, check the +B power voltage, high tension voltage, high tension protection, Ik protector and +B OVP operation.

Mark ⧓ :
R4098, R4019, C4012, IC4003, T4002,
T4003 .... E Board
Mark ◪ :
R4001, R4003, R4005, R4007, R4008, R4009, R4012, R4014, R4015, R4017, R4018, R4019, R4043, R4044, R4046, R4047, R4053, R4062, R4063, R4077, R4078, R4079, R4080, R4081, R4082, R4083, R4084, R4085, R4086, R4087, R4088, R4091, R4092, R4097, R4098, R4100, C4006, C4007, C4008, C4011, C4012, C4049, D4026, D4031, D4034, D4035, D4036, IC4003, T4002,
T4003 .... E Board

Use NF Power Supply or make sure that distortionfactor is 3% or less.

① +B Voltage (B+ Voltage)
Standard: 135.0 ± 2.0VDC (Confirm that the +B Voltage.)
Check Condition
Input Voltage: 120VAC
Check point: CN4012 (① pin) - CN4012 (② pin=GND) .... E Board
Input Signal: DOT
Controls: BRT. PIC. ⇒ MIN.

② +B MAX (B+ Maximum)
Standard: 137.0VDC less than (Confirm that the +B Voltage.)
Check Condition
Input Voltage: 130VAC
Check point: CN4012 (① pin) - CN4012 (② pin=GND) .... E Board
Input Signal: DOT
Controls: BRT. PIC. ⇒ MIN.

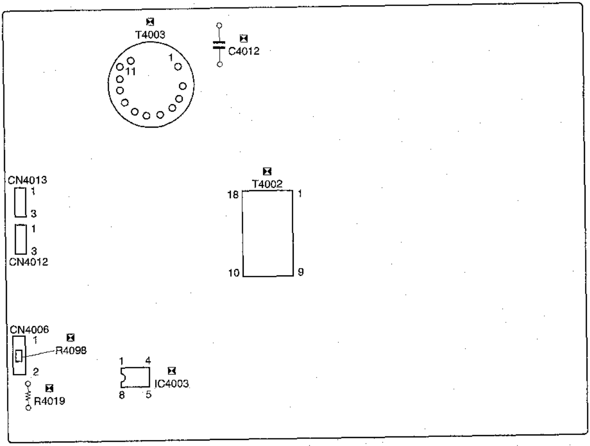
③ Anode Voltage
Standard: 31.00 ± 0.50kV (Confirm that the High Voltage.)
Check Condition
Input Voltage: 120VAC
Check point: CRT Anode - GND
Input Signal: Monoscope
Controls: BRT. PIC. ⇒ MAX.

④ High Voltage Protector
Standard: 33.70 ± 0.80kV (Confirm that the High Voltage.)
Check Condition
Input Voltage: 120VAC
Check point: CRT Anode - GND
Input Signal: DOT
Controls: BRT. PIC. ⇒ MIN.
Check method: Attach a variable resistor of 20kΩ to CN4006. Increase the high tension voltage and take reading when the protect starts functioning.

⑤ Ik protector
Standard: 2.850mA less than (Confirm that the Ik current.)
Check Condition
Input Voltage: 120VAC
Check point: Remove the connector CN4013 and connect an ammeter instead. (E board)
Input Signal: White 100%
Controls: BRT. PIC. ⇒ MIN. to MAX.
Check method: Turn off the ABL switch (S1002) of A board. Increase the BRT and PIC adjustment controls from MIN gradually and take reading when the protect starts functioning.

⑥ +B OVP (Over Voltage Protector)
Standard: 138.0 to 151.0VDC (Confirm that the +B Voltage.)
Check Condition
Input Voltage: 120VAC
Check point: CN4012 (① pin) - CN4012 (② pin=GND) .... E Board
Input Signal: DOT
Controls: BRT. PIC. ⇒ MIN.
Check method: Connect an external DC power supply and digital voltmeter to CN4012 pin ①. Apply 135V to it. Increase the DC power supply voltage gradually and take reading when the protect starts functioning.

E BOARD – B SIDE –


T4003
1
11
C4012
CN4013
1
3
1
3
CN4012
T4002
18
1
10
9
CN4006
1
R4098
2
R4019
1
4
IC4003
8
5

SECTION 5
CIRCUIT ADJUSTMENTS

5-1. BA BOARD ADJUSTMENT

5-1-1. Connection

1. Set the extension board (X mount board).
   Use RVP-411D as a screen output jig for adjustment of PWB-411D.

Note: Turn OFF the main power of the unit.

2. Set the BA board to adjust on the extension board (X mount board).

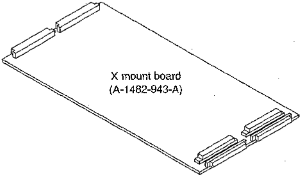


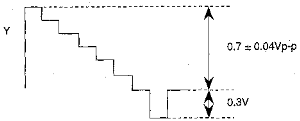
Fig.5-1

5-1-2. APC Free Running Frequency

1. Set the BA board input signal in the no-signal mode, and select the VIDEO input by means of VIDEO key.
2. Short-circuit TP3011 and TP3014 to enter the forced NTSC mode.
3. Connect the frequency counter to TP3013 of IC3009 (CXA1686M).
   The input impedance of the frequency counter shall be 1 MW or more. The input sensitivity shall be approx. 0.5 V.
4. Adjust CV3001 so that the counter reading will be as specified.
   Generated frequency
   Standard value: 14.318180 MHz ± 80 Hz
5. Short-circuit TP3012 and TP3014 to enter the forced PAL mode.
6. Adjust CV3002 so that the counter reading will be as specified.
   Generated frequency
   Standard value: 17.734475 MHz ± 80 Hz

5-1-3. YC Signal Level Adjustment

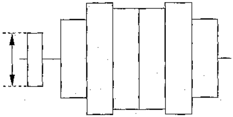
1. Input the PAL color bar to the BA board VIDEO input. (100% color bar)
   - Set VIDEO/YC SW in the VIDEO position.
2. Select the VIDEO input by means of VIDEO key.
3. Y level adjustment
   Apply the probe of an oscilloscope to TP3003, and adjust RV3001 so that the value will be as specified.



Y level: Standard value ...0.7V ± 0.04Vp-p (Excl. SYNC)

Fig.5-2

4. C level adjustment
   Apply the probe of an oscilloscope to TP3004, and adjust RV3002 so that the burst level will be as specified.



C level: Standard value ...0.3V ± 0.01Vp-p

Fig.5-3

5-1-4. Y Color Difference Adjustment

1. Input the PAL color bar to the BA board VIDEO input. (100% color bar)
2. Select the VIDEO input by means of VIDEO key.
3. Y level adjustment
   Apply the probe of an oscilloscope to TP3006, and adjust RV3003 so that the amplitude will be as specified.

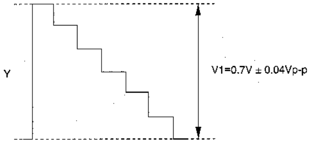


Fig.5-4

4. (R-Y) level adjustment
   Apply the probe of an oscilloscope to TP3007, and adjust RV3004 so that the amplitude will be as specified.

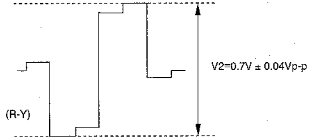


Fig.5-5

5. (B-Y) level adjustment
   Apply the probe of an oscilloscope to TP3008, and adjust RV3005 so that the amplitude will be as specified.

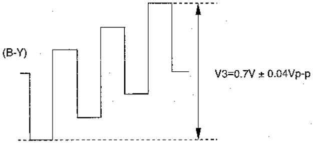
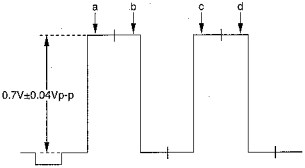


Fig.5-6

5-1-5. Color Level Adjustment

1. Input a PAL color bar to the BA board VIDEO input. (100% color bar)
2. Set VIDEO/YC SW in the VIDEO position.
3. Select the VIDEO input by means of VIDEO key of the remote controller.
4. Press RESET key of the remote controller.
5. Apply the probe of an oscilloscope to TP3401, and observe the waveforms.
6. Adjust RV3201 (PIC VR) so that the amplitude at point "a" will be as specified.
7. Adjust RV3202 (COL VR) and RV 3203 (HUE VR) so that points "a", "b", "c" and "d" will be almost flat.

TP3401 Waveforms (2R)



Standard value ; 0.7V±0.04Vp-p

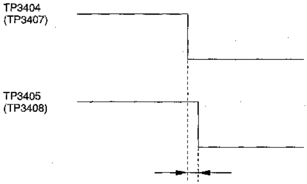
Fig.5-7

5-1-6. SHP Adjustment

1. Input the PAL color bar to the BA board VIDEO. (100% color bar)
2. Set VIDEO/YC SW in the VIDEO position.
3. Select the VIDEO input by means of VIDEO key of the remote controller.
4. Press RESET key of the remote controller.
5. Apply the probe of the DIGITAL VOLT METER to TP3201, and adjust RV3204 (SHP VR) so that the DC voltage will be as specified.
   Standard value: 6 V ± 0.2 VDC

5-1-7. PLL Adjustment

1. Input a PAL color bar to the BA board VIDEO input. (100% color bar)
2. Set VIDEO/YC SW in the VIDEO position.
3. Select the VIDEO input by means of VIDEO key of the remote controller.
4. Press RESET key of the remote controller.
5. Apply the probe of an oscilloscope to TP3404 and TP3405, and adjust L3440 so that the trailing edge of both waveforms will be as specified.
6. Apply the probe of an oscilloscope to TP3407 and TP3408, and adjust L3437 so that the trailing edge of both waveforms will be as specified.



Standard value: ± 50nS

Fig.5-8

5-2. A BOARD ADJUSTMENT

For the RVP-411DS/411DJS/411DMS/511DS/511DJS/511DMS and CHP-411D/411DJ/411DM, only "5-2-2. DIP Switch Setting" is required.

5-2-1. Connection

1. Turn off the main power of the unit, and set the extension board on AM board CN124.
2. Set the A board for adjustment on the extension board.

5-2-2. Dip Switch Setting

1. Set the dip switches S1503 and S1504 as shown in Fig.5-9.

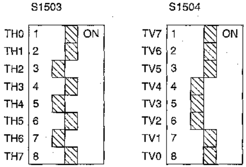


Fig.5-9

5-2-3. Confirmation of Operation

1. Input an RGB signal to the A board. (Color bar NTSC double-speed 31.5K/60 (VG814 No.9))
2. Check that the color bar appears on the screen when INPUT B key is pressed.

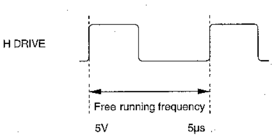
5-2-4. Shading Level Adjustment

1. Check TP1001 with DIGITAL VOLT METER, and adjust VR1500 so that the TP1001 DC voltage will be as specified.
Standard value: 1 V ± 0.05 V

5-3. D BOARD ADJUSTMENT

5-3-1. H DRIVE Adjustment

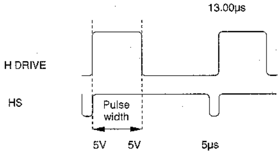
1. Observe the waveform of H DRIVE via an oscilloscope.
2. Turn RV5002. and make adjustment so that the free running frequency will be as specified.
   HS input to be OFF.


31.6kHz
H DRIVE
Free running frequency
5V
5μs

Free running frequency
Standard value : 31.6kHz ± 0.1Hz

Fig.5-10

3. Turn RV5003, and make adjustment so that the pulse width will be as specified.

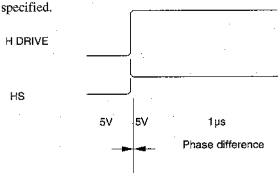

13.00μs
H DRIVE
HS
Pulse width
5V
5V
5μs

H DRIVE pulse width
Standard value : 13.0μs ± 0.1μs

Fig.5-11

5-3-2. H SHIFT Center Adjustment

1. Input H SYNC to HS.
2. Connect HS to H DRIVE CH.2 of the oscilloscope.
3. Turn RV5001, and make adjustment so that the phase difference between H DRIVE and HS will be as specified.


H DRIVE
HS
5V
5V
1μs
Phase difference

Phase difference
Standard value : 0μs ± 0.1μs

Fig.5-12

5-3-3. Confirmation of Operation

1. Confirmation of registration waveform output
   Observe the test point of respective waveforms by means of an oscilloscope, and confirm that respective waveforms are output correctly.

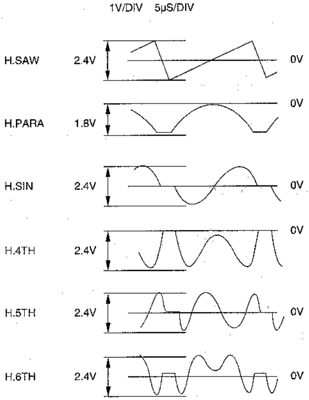

1V/DIV 5μS/DIV
H.SAW
2.4V
0V
H.PARA
1.8V
0V
H.SIN
2.4V
0V
H.4TH
2.4V
0V
H.5TH
2.4V
0V
H.6TH
2.4V
0V

Fig.5-13

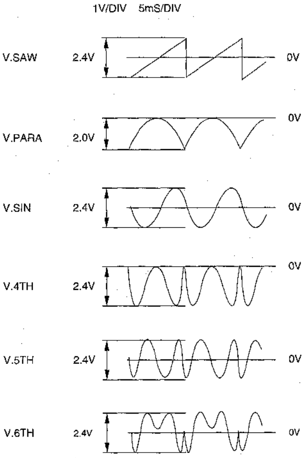

1V/DIV 5mS/DIV
V.SAW
2.4V
0V
V.PARA
2.0V
0V
V.SIN
2.4V
0V
V.4TH
2.4V
0V
V.5TH
2.4V
0V
V.6TH
2.4V
0V

Fig.5-14

2. Confirmation of divided waveform output
Observe the test point of respective waveforms by means of an oscilloscope, and confirm that respective waveforms are output correctly.

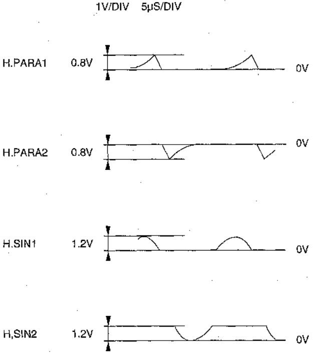

1V/DIV 5µS/DIV
H.PARA1
0.8V
0V
H.PARA2
0.8V
0V
H.SIN1
1.2V
0V
H,SIN2
1.2V
0V

Fig.5-15

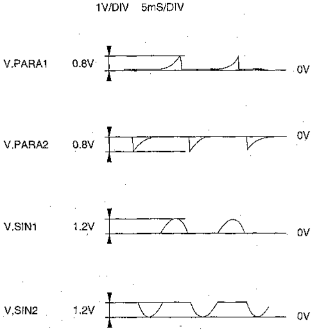

1V/DIV 5mS/DIV
V.PARA1
0.8V
0V
V.PARA2
0.8V
0V
V.SIN1
1.2V
0V
V,SIN2
1.2V
0V

Fig.5-16

5-4. GC BOARD ADJUSTMENT

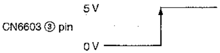
5-4-1. Generated Frequency Adjustment

1. Connect the frequency counter.
2. Adjust RV6401 so that the frequency will be as specified.
   IC6400 generated frequency standard value: 65.0 kHz ± 2.0 kHz

5-5. G (GD) BOARD ADJUSTMENT

5-5-1. AC Down Operating Point Adjustment

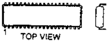
1. Set AC input voltage to 50 V ± 1 V 50/60 Hz using the slidack, etc.
2. Connect an oscilloscope to CN6603 ③ pin on the GD board.
3. Turn on main power of the set to activate standby status.
4. Observing the oscilloscope, adjust RV6823 on the GD board so as to get the point where the voltage changes from 0 V to 5 V.



Adjust where the voltage changes form 0 V to 5 V.

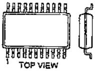
SECTION 6
SEMICONDUCTORS

AM27C010-70DC
AM27C512-150DC
TDA9141-N2C



32pin DIP

BA7657F-E2
CXD1171M
DAC8840FS
DAC8840FSR



24pin SOP

CA0007AM
EL2444CS
LC2932IPW
LTC491CS
MC14066BF
MC14069UBF
MC74AC32MEL
MC74AC74MEL
SN74AS30NS
SN74AS1004ANS
SN74HCT245ANS
MC74HC00AF
SN74HC00ANS
SN74HC02ANS
SN74HC04ANS
SN74HC08AN
SN74HC08ANS
SN74HC10ANS
SN74HC14ANS
SN74HC32ANS
SN74HC74ANS
SN74HC126ANS
SN74HC138ANS
SN74HC157ANS
SN74HC164ANS
SN74LS06NS
TC74AC00F
TC74AC02F
TC74AC04F
TC74AC08F
TC74AC14F
TC74AC32F
TC74AC74F
TC74HC00AF
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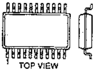
TC74HC86AF
TC74HC221AF
TLC2932IPW



14pin SOP

CXA1315M
CXA1875AM
HD14053BFP
LT1260CS
MAX8213BCSE-TE2
MC14053BF
MC74AC32MEL
MC74AC163MEL
MC74HC133F
MC74HC175F
MC74HC4538AF
MC74HC4538F
PCF8574T
SN74ALS166NS-E20
SN74HC109ANS
SN74HC153ANS
SN74HC157ANS
SN74HC161ANS
SN74HC164ANS
SN74HC4040ANS
TC74AC112FEL
TC74AC161F
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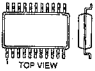
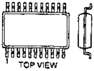
TC74HC595AF
TC74HC4053AF
TC74HC4511AF



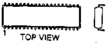
16pin SOP

CXA1686M



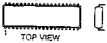
30pin SOP

CXA1739S



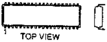
48pin DIP

CXA2016S



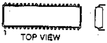
22pin DIP

CXA3069S
M52001SP



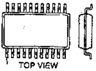
30pin DIP

CXA8038P
HD14538BP
TDA4665T-T
µC3854N



16pin DIP

CXD1176Q



32pin SOP

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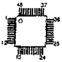
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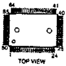
CXD2000Q
CXD2024AQ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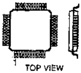
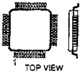
41
65
40
80
25
1
24
TOP VIEW

CXD2018Q
CXK1203AQ



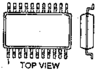
48pin QFP

CXK48324R



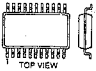
80pin QFP

CXK58257BM-70LL



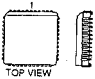
28pin SOP

EL4094CS-TE2
LM393PS
MAX706CSA
NJM082BM
NJM2235M
NJM2234M
µPC4082G2
NJM4556M-A
TL082M



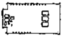
8pin SOP

HD63484CP8

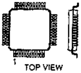


68pin QFJ

HD6413003RF-12



HN27C1024HCC-10
µPD71055GB-10-3B4



44pin QFP

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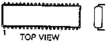

28pin DIP

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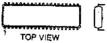
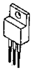
PA0053B

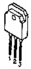


18pin DIP

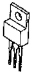
LM2940CT-5.0
LM2940CT-9.0
LM2940CT-12
LM2940CT-15
LM7812CT
NJM7812CT
PQ09RA1
PQ09RF11
TA7812S
µPC24M12AHF
µPC2405HF



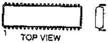
LM2990T-5.0



LM2990T-12

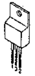


LM6361M
MM1118XFBE
M5218AP
NJM082D
NJM4558D
µPC814G2



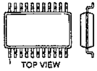
8pin DIP

LM7912CT
NJM7912FA



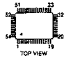
C, TRANSISTOR

MB88362PFV
PCF8584T
SN74HC574ANS
TC74ACT574F
TC74AC540F
TC74AC541F
TC74HC573AF
TC74HC688AF



20pin SOP

MB90091APF-114


51
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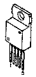
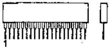
1
19
TOP VIEW

MC14538BF



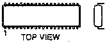
MN1280-S

MARKING SIDE VIEW



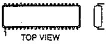
3pin SIP

M52321SP



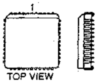
36pin DIP

NJM2058D
SN74HC11AN
µPC339C



14pin DIP

AM27C2048-RVP1.02
AM27C2048-RVP1.10
PC16550DV



44pin QFJ

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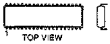
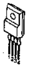


42pin DIP

PQ05RF1



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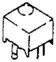
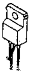
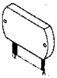


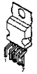
SE-135N



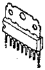
STK392-040



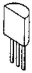
STV9379



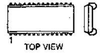
TDA6111Q/N4



TL431CLP
µPC1093J

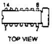


TC551664AJ-20

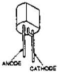


44pin SOJ

µPC319G2

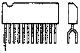

14
8
1
7
TOP VIEW

µPC574J


ANODE
CATHODE

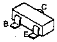
VPJ03

MARKING SIDE VIEW



9pin ZIP

DTA144EKA
DTC144EK
DTC144EKA
2SA1037AK-T146-QR
2SA1037AK-T146-R
2SA1037K-T-146-QR
2SA1037K-T-146-R
2SA1162-G
2SA1162-YG
2SC1623-L5L6
2SC2412K-T-146-QR
2SC2712-YG



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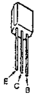

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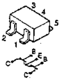
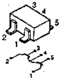

3
4
5
2
1
B
E
B
C
C

FMW1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2SB1565F
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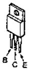

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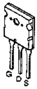

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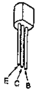
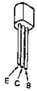
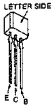
2SA1013-R
2SA933S
2SD789-34
2SD789-4TZ



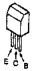
2SA1015-GR
2SA1015-Y
2SA733-K
2SC1815GR
2SC1815-Y
2SC1815YGR
2SC2878-AB



2SA1175-F
2SA1175-HFE
2SA1309A-QRSTA
2SA1309A-STA
2SC2785-F
2SC2785-HFE
2SC3311A-STA


LETTER SIDE
E
C
B

2SA1221-L
2SA1221-T
2SB734-T-4
2SB734-34
2SC3209LK
2SD774-T-34
2SD774-34



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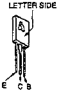
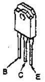
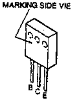
2SB772-P
2SB772-Q
2SC2688-L
2SC2688-LK
2SD3505DE
2SD882-P


LETTER SIDE
E
C
B

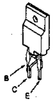
2SA1492M-OPY
2SA1492-Y



2SC3997CA


MARKING SIDE VIEW
B
C
E

2SC4632LS-CB7



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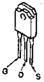
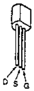


2SK523-M1



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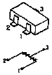
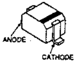
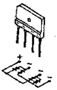


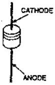
DTZ-TT11-3.3B
DTZ-TT11-5.1
DTZ5.1B
SC016-2-TE12RA
1T363
1T363A-M20-T8A


ANODE
CATHODE

D1NL40-TA
D1NL40-TR2
RBV-1506



D1NS4
HZS9.1NB2
MTZJ6.2
RB441Q
RD12ES-B2
RD13ES-B
RD13ES-B2
RD18ES-B2
RD3.0ES-B
RD3.3ES-B2
RD4.3ES-B1
RD5.1ES-B1
RD5.1ES-B2
RD5.6ES-B1
RD6.8ES-B2
RD9.1ES-B2
1SS119-25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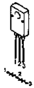
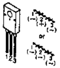
D10LC20UR
D5SC4MR-F



D10LC20U-F
D10SC6MR



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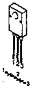
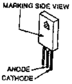
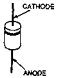
D10SC6M



D5LC20U


MARKING SIDE VIEW
ANODE
CATHODE

EGP20G
GP08D
GP08DPKG23
HZT33-02
MTZJ-T-77-5.1
RD18E-B
RGP02-20EL-6394
RGP15GPKG23
1SS83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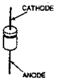
ERC06-15S
ERC91-02
ESJA89-12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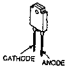
ERD08M-15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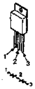
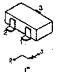


MA3024
MA3033-L
MA3051M
MA3091M
MA3130
RD10M-B
RD10M-B2
RD3.0M-B1
RD5.1M-B2
RD7.5M-B2
RD9.1M-B2



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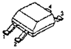

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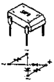
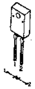
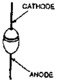


S16L60



V06C
V11N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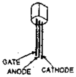
03P2M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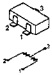
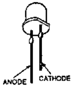
CATHODE

1SS123
1SS226



DIODE

PY5504S-1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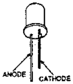
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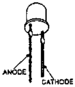
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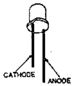

CATHODE
ANODE

SECTION 7
EXPLODED VIEWS

NOTE:

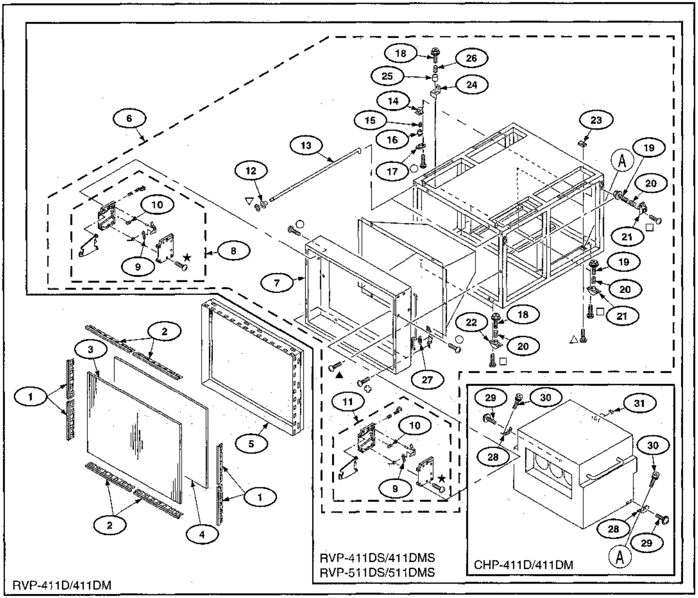
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The componants identified by mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifies par une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

7-1. SCREEN AND CABINET

★: 7-685-548-19 +BTP3X12
▲: 7-685-661-79 +BVTP4X12
○: 7-685-547-19 +BTP3X10
△: 7-685-646-79 +BVTP3X8
□: 7-682-591-09 +P6X20
▽: 7-624-106-04 E3.0
✚: 7-682-548-09 +B3X8


18
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16
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13
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6
10
8
9
23
19
A
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21
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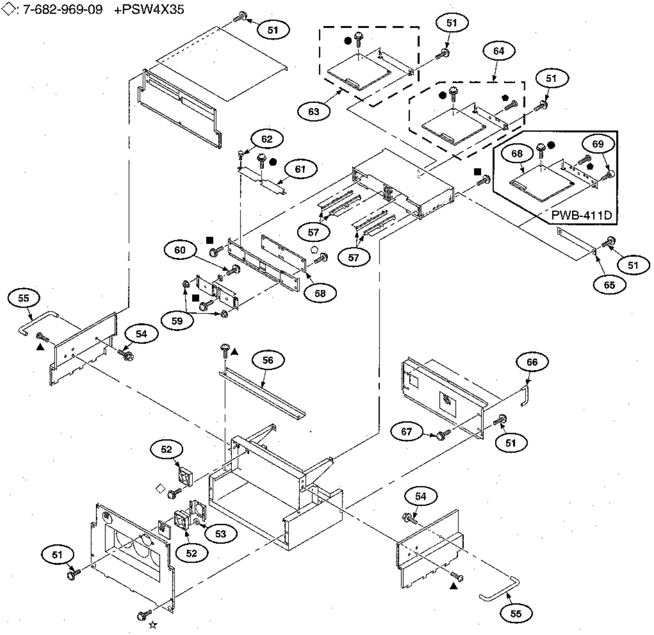
20
21
7
22
18
20
2
3
1
5
27
11
10
29
30
31
28
30
9
1
2
4
28
29
A
RVP-411DS/411DMS
RVP-511DS/511DMS
CHP-411D/411DM
RVP-411D/411DM

SCREEN AND CABINET

Rf.No.	Part No.	Description	Remark
1	4-052-727-11	RETAINNER (S), SCREEN (RVP-411D/411DM)	
2	4-052-726-11	RETAINNER (L), SCREEN (RVP-411D/411DM)	
3	4-052-039-11	ILLUMINATOR (L) (RVP-411D/411DM)	
4	4-052-040-11	ILLUMINATOR (TFF) (RVP-411D/411DM)	
5	*X-4034-447-1	HOLDER ASSY, SCREEN (RVP-411D/411DM)	
6	*X-4034-448-1	CABINET ASSY (RVP-411D/411DM/411DS/411DMS)	7-27
6	*X-4035-059-1	CABINET ASSY (RVP-511DS/511DMS)	7-27
7	*4-058-601-02	BRACKET, SCREEN (RVP-411D/411DM/411DS/411DMS)	
7	*4-061-739-01	BRACKET, SCREEN (RVP-511DS/511DMS)	
8	*X-4034-446-1	HOOK (L) ASSY, SCREEN HOLDER (RVP-411D/411DM/411DS/411DMS/511DS/511DMS)	9,10
9	3-542-915-00	SPRING, TENSION (RVP-411D/411DM/411DS/411DMS/511DS/511DMS)	
10	*3-667-224-00	SPRING, COMPRESSION (RVP-411D/411DM/411DS/411DMS/511DS/511DMS)	
11	*X-4034-445-1	HOOK (R) ASSY, SCREEN HOLDER (RVP-411D/411DM/411DS/411DMS/511DS/511DMS)	9,10
12	*4-058-564-01	SLEEVE, ROD (RVP-411D/411DM/411DS/411DMS/511DS/511DMS)	
13	*4-058-565-01	ROD (RVP-411D/411DM/411DS/411DMS)	
13	*4-061-735-01	ROD (RVP-511DS/511DMS)	
14	*4-058-561-01	CASE, KNOB (RVP-411D/411DM/411DS/411DMS/511DS/511DMS)	
15	3-695-532-01	SPRING, COMPRESSION (RVP-411D/411DM/411DS/411DMS/511DS/511DMS)	
16	*4-058-563-01	KNOB, ROTATION (RVP-411D/411DM/411DS/411DMS/511DS/511DMS)	
17	*4-058-562-01	COVER, KNOB (RVP-411D/411DM/411DS/411DMS/511DS/511DMS)	
18	4-052-748-01	BOLT, +HX HEDA WITH WASHER (RVP-411D/411DM/411DS/411DMS/511DS/511DMS)	
19	4-052-748-11	BOLT, +HX HEAD WITH WASHER (RVP-411D/411DM/411DS/411DMS/511DS/511DMS)	
20	4-052-761-01	SPRING, COMPRESSION (RVP-411D/411DM/411DS/411DMS/511DS/511DMS)	
21	*4-052-740-11	BLOCK, FOOT (RVP-411D/411DM/411DS/411DMS/511DS/511DMS)	
22	*4-052-740-01	BLOCK, FOOT (RVP-411D/411DM/411DS/411DMS)	
22	*4-052-740-11	BLOCK, FOOT (RVP-511DS/511DMS)	
23	*4-059-456-01	SPACER, BLOCK (RVP-411D/411DM/411DS/411DMS/511DS/511DMS)	
24	*4-059-457-01	HOLDER, CHASSIS (RVP-411D/411DM/411DS/411DMS/511DS/511DMS)	
25	*4-059-459-01	SPACER, BOLT (RVP-411D/411DM/411DS/411DMS/511DS/511DMS)	
26	*4-059-458-01	SPRING, COMPRESSION (RVP-411D/411DM/411DS/411DMS/511DS/511DMS)	
27	3-643-345-00	SPRING, TENSION (S) (RVP-411D/411DM/411DS/411DMS/511DS/511DMS)	
28	*4-052-736-01	BRACKET, CHASSIS	
29	3-701-810-81	SCREW, TERMINAL	
30	4-052-747-11	BOLT, +HX HEAD WITH WASHER	
31	*4-957-207-01	COVER (9P RECEPTACLE)	

7-2. COVER

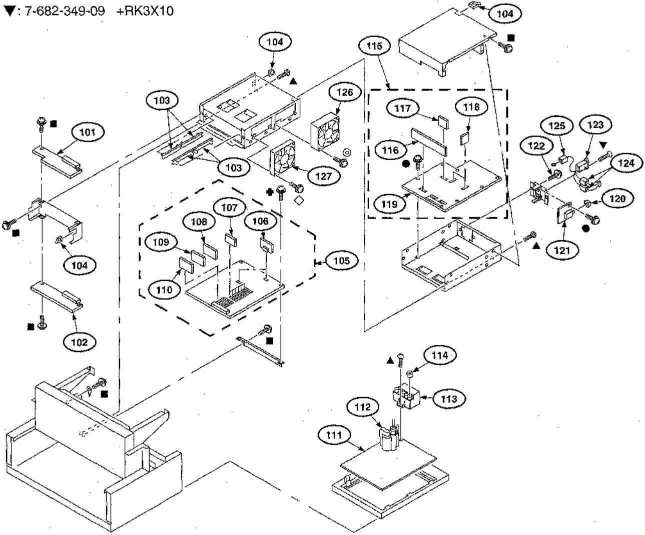
▲: 7-685-661-79 +BVTP4X12
●: 7-682-948-01 +PSW3X8
■: 7-682-962-01 +PSW4X10
◇: 7-682-969-09 +PSW4X35
⬟: 7-685-647-79 +BVTP3X10
⬠: 7-682-950-01 +PSW3X12
☆: 7-682-962-09 +PSW4X10



Rf.No.	Part No.	Description	Remark
51	3-701-810-81	SCREW, TERMINAL	
52	1-698-046-11	FAN, DC	
53	4-308-030-01	WASHER	
54	4-052-747-01	BOLT, +HX HEAD WITH WASHER	
55	*4-052-734-01	HANDLE	
56	*4-059-170-01	PLEATE, PROTECTOR	
57	*4-060-949-01	SUPPORT, PWB	
58	*A-1293-500-A	AM BOARD, COMPLETE	
59	4-908-880-01	NUT (M3), FLANGE	
60	4-382-854-11	SCREW (M3X10), P, SW (+)	
61	*4-059-171-01	GUARD, WIRE	
62	3-531-576-11	RIVET	
63	*A-1306-547-A	M BOARD, COMPLETE	(RVP-411D/411DM)
63	*A-1306-560-A	M BOARD, COMPLETE	(EXCEPT RVP-411D/411DM)
64	*A-1298-178-A	A BOARD, COMPLETE	(RVP-411D/411DM)
64	*A-1298-317-A	A BOARD, COMPLETE	(EXCEPT RVP-411D/411DM)
65	*4-059-121-01	PLATE, BLIND	
66	4-059-107-01	HANDLE	
67	3-167-128-02	SCREW, M5X14	
68	*A-1135-872-A	BA BOARD, COMPLETE (PWB-411D)	
69	4-059-754-01	SCREW, PANEL (PWB-411D)	

7-3. CHASSIS

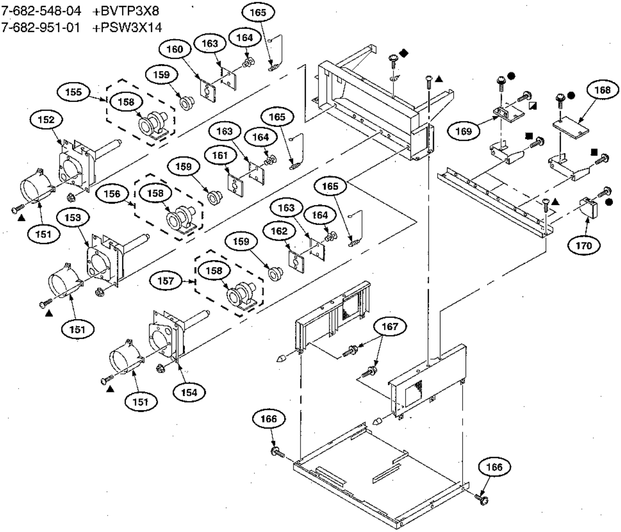
▲: 7-685-661-79 +BVTP4X12
●: 7-682-948-01 +PSW3X8
■: 7-682-962-01 +PSW4X10
▼: 7-682-349-09 +RK3X10
◇: 7-682-969-09 +PSW4X35
◎: 7-682-671-09 +PSW4X45
✚: 7-682-660-09 +PSW4X10



Rf.No.	Part No.	Description	Remark
101	*A-1311-564-A	GM BOARD, COMPLETE	
102	*A-1343-298-A	DM BOARD, COMPLETE	
103	*4-360-309-11	SUPPORT, PC BOARD	
104	*4-316-015-00	HOLDER, WIRE	
105	*A-1346-570-A	D BOARD, COMPLETE	106-110
106	*A-1343-236-A	D3 BOARD, COMPLETE	
107	*A-1343-235-A	D2 BOARD, COMPLETE	
108	*A-1343-253-A	D1B BOARD, COMPLETE	
109	*A-1343-252-A	D1G BOARD, COMPLETE	
110	*A-1343-234-A	D1R BOARD, COMPLETE	
111	*A-1501-219-A	E BOARD, COMPLETE	
112	⚠X-4034-412-1	TRASFORMER ASSY, FLYBACK	
113	⚠1-453-108-11	DC BLOCK, HIGH-VOLTAGE	
114	4-373-137-01	CAP (Z), RUBBER	
115	*A-1316-362-A	G BOARD, COMPLETE (RVP-411D/411DS/511DS, CHP-411D)	116-119
115	*A-1316-363-A	G BOARD, COMPLETE (RVP-411DM/411DMS/511DMS, CHP-411DM)	
116	*A-1316-301-A	GD BOARD, COMPLETE	
117	*A-1311-539-A	GB BOARD, COMPLETE	
118	*A-1316-300-A	GC BOARD, COMPLETE	
119	*A-1311-537-A	G BOARD, COMPLETE (RVP-411D/411DS/511DS, CHP-411D)	
119	*A-1311-587-A	G BOARD, COMPLETE (RVP-411DM/411DMS/511DMS, CHP-411DM)	
120	4-362-811-00	BUTTON, MAIN POWER	
121	*A-1311-538-A	GA BOARD, COMPLETE (RVP-411D/411DS/511DS, CHP-411D)	
121	*A-1311-568-A	GA BOARD, COMPLETE (RVP-411DM/411DMS/511DMS, CHP-411DM)	
122	3-701-810-81	SCREW, TERMINAL	
123	⚠1-526-813-12	INLET, AC (3P)	
124	1-543-827-11	CLAMP, SLEEVE FERRITE	
125	1-543-653-11	CORE ASSY, BEAD(DIVISION TYPE)	
126	1-698-854-11	FAN, DC	
127	1-698-641-11	FAN, DC	

7-4. PICTURE TUBE

▲: 7-685-661-79 +BVTP4X12
●: 7-682-948-01 +PSW3X8
■: 7-682-962-01 +PSW4X10
◆: 7-682-548-04 +BVTP3X8
◪: 7-682-951-01 +PSW3X14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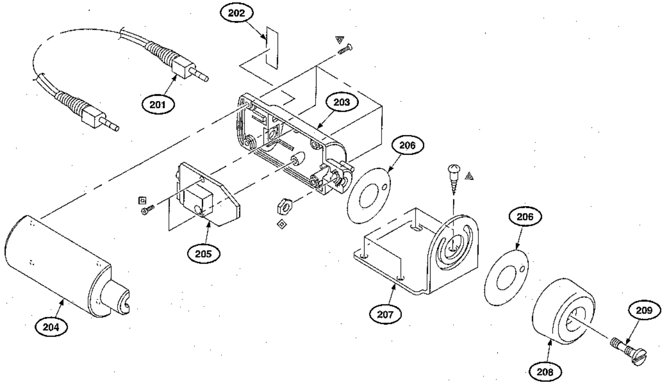
Rf.No.	Part No.	Description	Remark
151	4-056-258-01	LENS (DELTA 78)	
152	⚠8-733-515-05	CRT 07MAC2(R)(LC)	
153	⚠8-733-509-05	CRT 07MAC2(G)(GC LENS)	
154	⚠8-733-511-05	CRT 07MAC2(B)(I)	
155	⚠A-1480-198-A	DY (R) ASSY	158
156	⚠A-1480-197-A	DY (G) ASSY	158
157	⚠A-1480-196-A	DY (B) ASSY	158
158	⚠1-451-442-11	DEFLECTION YOKE	
159	⚠1-452-790-21	NECK ASSY (NA-295)	
160	*A-1331-616-A	C2R BOARD, COMPLETE	
161	*A-1331-617-A	C2G BOARD, COMPLETE	
162	*A-1331-618-A	C2B BOARD, COMPLETE	
163	*4-059-169-01	GUARD, C PWB	
164	3-531-576-11	RIVET	
165	4-052-765-01	SPRING	
166	3-701-810-81	SCREW, TERMINAL	
167	4-052-747-21	BOLT, +HX HEAD WITH WASHER	
168	*A-1343-313-A	E2 BOARD, COMPLETE	
169	*A-1331-656-A	C1 BOARD, COMPLETE	
170	⚠1-225-401-11	RES ASSY, HIGH-VOLTAGE	

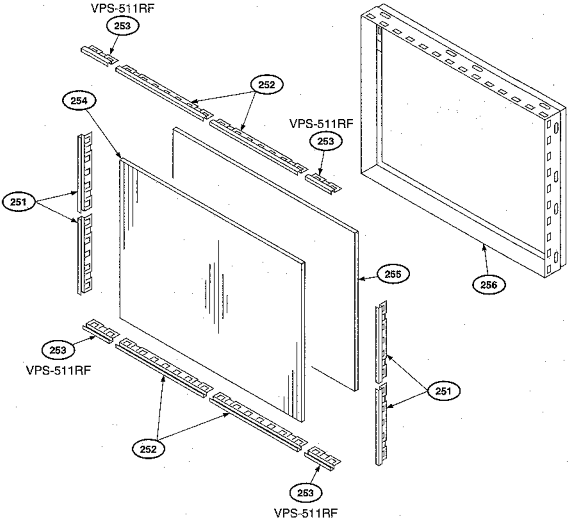
7-5. RM-PJ10

△: 7-621-846-40 +R4.1X16
▣: 7-685-133-19 +BVTP2.6X6
▽: 7-685-234-19 +K2.6X8
◈: 7-684-025-04 NUT



Rf.No.	Part No.	Description	Remark
201	1-696-607-11	CORD, CONNECTION (WITH PLUG)	
202	*4-037-227-01	LABEL INPUT	
203	4-037-228-01	A CASE	
204	4-037-229-01	B CASE	
205	8-742-020-00	IC SBX1610-09	
206	4-037-223-01	SPACER	
207	*4-037-224-01	BASE	
208	4-037-226-01	CAP	
209	4-037-225-01	SCREW SPECIAL	

7-6. VPS-411RF/511RF


VPS-511RF
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VPS-511RF
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VPS-511RF
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VPS-511RF

Rf.No.	Part No.	Description	Remark	Rf.No.	Part No.	Description	Remark
251	4-052-727-11	RETAINER (S), SCREEN (VPS-411RF)		254	4-061-727-01	PLATE (L), DIF (VPS-511RF)	
251	4-061-731-01	RETAINER (B), SCREEN (VPS-511RF)		255	4-052-040-11	ILLUMINATOR (TFF) (VPS-411RF)	
252	4-052-726-11	RETAINER (L), SCREEN (VPS-411RF)		255	4-061-726-01	PLATE (F), DIF (VPS-511RF)	
252	4-061-731-01	RETAINER (B), SCREEN (VPS-511RF)		256	* X-4034-447-1	HOLDER ASSY, SCREEN (VPS-411RF)	
253	4-061-729-01	RETAINER (A), SCREEN (VPS-511RF)		256	* X-4035-057-1	HOLDER ASSY, SCREEN (VPS-511RF)	
254	4-052-039-11	ILLUMINATOR (L) (VPS-411RF)					

SECTION 8
ELECTRICAL PARTS LIST

NOTE:

The componants identified by mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifies par une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

- The components identified by ⧓ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

When indicating parts by reference number, please include the board name.

RESISTORS
- All resistors are in ohms
- F : nonflammable
- CAPACITORS
  PF : μμ F
- There are some cases the reference number on one board overlaps on the other board. Therefore, when ordering parts by the reference number, please include the board name.

RVP-411D/411DM/411DS/411DMS/511DS/511DMS, CHP-411D/411DM

Rf.NO.	PART NO.	DESCRIPTION	REMARK
	*A-1293-500-A	AM BOARD, COMPLETE	
		********************************	
		<CONNECTOR>	
CN121	1-560-731-00	HEADER, PIN 50P	
CN125	*1-564-512-11	PLUG, CONNECTOR 9P	
CN126	*1-564-506-11	PLUG, CONNECTOR 3P	
CN127	*1-564-507-11	PLUG, CONNECTOR 4P	
CN128	*1-564-507-11	PLUG, CONNECTOR 4P	
CN129	*1-564-507-11	PLUG, CONNECTOR 4P	
CN130	*1-564-506-11	PLUG, CONNECTOR 3P	
		<DIODE>	
D101	8-719-920-67	DIODE ERC91-02	
******	**************	**	**********
	*A-1298-178-A	A BOARD, COMPLETE	(RVP-411D/411DM)
	*A-1298-317-A	A BOARD, COMPLETE	(EXCEPT RVP-411D/411DM)
		*****************************	
	*1-526-660-21	SOCKET, IC (DP) 32P	
	*4-032-770-81	HEAT SINK, V-OUT	
	3-724-182-01	NUT (SMALL JACK), M6	
	*4-058-568-01	PANEL, A	
	7-682-948-01	SCREW +PSW 3X8	
	7-682-548-04	SCREW +BVTP 3X8 TYPE 2	
		<CAPACITOR>	
C1001	1-126-405-11	ELECT CHIP 10MF 20% 50V	
C1002	1-104-760-11	CERAMIC CHIP 0.047MF 10% 50V	
C1003	1-104-760-11	CERAMIC CHIP 0.047MF 10% 50V	
C1004	1-126-400-11	ELECT CHIP 22MF 20% 35V	
C1005	1-126-405-11	ELECT CHIP 10MF 20% 50V	
C1006	1-104-760-11	CERAMIC CHIP 0.047MF 10% 50V	
C1007	1-104-760-11	CERAMIC CHIP 0.047MF 10% 50V	
C1008	1-126-405-11	ELECT CHIP 10MF 20% 50V	
C1009	1-126-405-11	ELECT CHIP 10MF 20% 50V	
C1010	1-104-760-11	CERAMIC CHIP 0.047MF 10% 50V	
C1011	1-104-760-11	CERAMIC CHIP 0.047MF 10% 50V	
C1012	1-126-400-11	ELECT CHIP 22MF 20% 35V	
C1013	1-126-405-11	ELECT CHIP 10MF 20% 50V	
C1014	1-104-760-11	CERAMIC CHIP 0.047MF 10% 50V	
C1015	1-104-760-11	CERAMIC CHIP 0.047MF 10% 50V	
C1016	1-126-405-11	ELECT CHIP 10MF 20% 50V	
C1017	1-104-760-11	CERAMIC CHIP 0.047MF 10% 50V	
C1018	1-126-405-11	ELECT CHIP 10MF 20% 50V	
C1019	1-104-760-11	CERAMIC CHIP 0.047MF 10% 50V	
C1020	1-126-400-11	ELECT CHIP 22MF 20% 35V	
C1022	1-107-725-11	CERAMIC CHIP 0.1MF 10% 16V	
C1023	1-126-405-11	ELECT CHIP 10MF 20% 50V	
C1024	1-126-405-11	ELECT CHIP 10MF 20% 50V	
C1025	1-104-760-11	CERAMIC CHIP 0.047MF 10% 50V	
C1026	1-104-760-11	CERAMIC CHIP 0.047MF 10% 50V	
C1027	1-126-405-11	ELECT CHIP 10MF 20% 50V	
C1028	1-104-760-11	CERAMIC CHIP 0.047MF 10% 50V	
C1029	1-107-725-11	CERAMIC CHIP 0.1MF 10% 16V	
C1030	1-136-165-00	FILM 0.1MF 5% 50V	
C1031	1-136-165-00	FILM 0.1MF 5% 50V	
C1032	1-136-165-00	FILM 0.1MF 5% 50V	
C1033	1-136-165-00	FILM 0.1MF 5% 50V	
C1034	1-104-760-11	CERAMIC CHIP 0.047MF 10% 50V	
C1035	1-126-405-11	ELECT CHIP 10MF 20% 50V	
C1037	1-126-405-11	ELECT CHIP 10MF 20% 50V	
C1038	1-126-405-11	ELECT CHIP 10MF 20% 50V	
C1039	1-104-760-11	CERAMIC CHIP 0.047MF 10% 50V	
C1040	1-104-760-11	CERAMIC CHIP 0.047MF 10% 50V	
C1042	1-104-760-11	CERAMIC CHIP 0.047MF 10% 50V	
C1050	1-126-396-11	ELECT CHIP 47MF 20% 16V	
C1051	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C1052	1-126-396-11	ELECT CHIP 47MF 20% 16V	
C1053	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C1054	1-126-396-11	ELECT CHIP 47MF 20% 16V	
C1055	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C1056	1-126-396-11	ELECT CHIP 47MF 20% 16V	
C1057	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C1058	1-126-396-11	ELECT CHIP 47MF 20% 16V	
C1059	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C1060	1-126-396-11	ELECT CHIP 47MF 20% 16V	
C1061	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C1062	1-163-005-11	CERAMIC CHIP 470PF 10% 50V	
C1064	1-136-153-00	FILM 0.01MF 5% 50V	

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Rf.NO.	PART NO.	DESCRIPTION			REMARK
C1065	1-136-153-00	FILM	0.01MF	5%	50V
C1066	1-136-153-00	FILM	0.01MF	5%	50V
C1067	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C1068	1-126-405-11	ELECT CHIP	10MF	20%	50V
C1069	1-126-396-11	ELECT CHIP	47MF	20%	16V
C1070	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1071	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C1072	1-126-396-11	ELECT CHIP	47MF	20%	16V
C1073	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1074	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C1075	1-126-396-11	ELECT CHIP	47MF	20%	16V
C1076	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1077	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C1078	1-126-396-11	ELECT CHIP	47MF	20%	16V
C1079	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1080	1-126-396-11	ELECT CHIP	47MF	20%	16V
C1081	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1082	1-126-396-11	ELECT CHIP	47MF	20%	16V
C1083	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1084	1-136-153-00	FILM	0.01MF	5%	50V
C1085	1-126-396-11	ELECT CHIP	47MF	20%	16V
C1086	1-136-153-00	FILM	0.01MF	5%	50V
C1087	1-104-760-11	CERAMIC CHIP	0.047MF	10%	50V
C1088	1-126-405-11	ELECT CHIP	10MF	20%	50V
C1089	1-136-153-00	FILM	0.01MF	5%	50V
C1090	1-136-153-00	FILM	0.01MF	5%	50V
C1091	1-136-153-00	FILM	0.01MF	5%	50V
C1092	1-136-153-00	FILM	0.01MF	5%	50V
C1093	1-126-396-11	ELECT CHIP	47MF	20%	16V
C1094	1-126-402-11	ELECT CHIP	2.2MF	20%	50V
C1095	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C1096	1-126-396-11	ELECT CHIP	47MF	20%	16V
C1097	1-126-402-11	ELECT CHIP	2.2MF	20%	50V
C1098	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C1099	1-126-402-11	ELECT CHIP	2.2MF	20%	50V
C1100	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C1107	1-104-760-11	CERAMIC CHIP	0.047MF	10%	50V
C1108	1-126-405-11	ELECT CHIP	10MF	20%	50V
C1109	1-104-760-11	CERAMIC CHIP	0.047MF	10%	50V
C1110	1-126-405-11	ELECT CHIP	10MF	20%	50V
C1114	1-104-760-11	CERAMIC CHIP	0.047MF	10%	50V
C1115	1-126-405-11	ELECT CHIP	10MF	20%	50V
C1116	1-126-405-11	ELECT CHIP	10MF	20%	50V
C1117	1-162-638-11	CERAMIC CHIP	1MF		16V
C1118	1-126-405-11	ELECT CHIP	10MF	20%	50V
C1119	1-104-760-11	CERAMIC CHIP	0.047MF	10%	50V
C1120	1-104-760-11	CERAMIC CHIP	0.047MF	10%	50V
C1121	1-126-405-11	ELECT CHIP	10MF	20%	50V
C1122	1-126-397-11	ELECT CHIP	33MF	20%	25V
C1123	1-162-638-11	CERAMIC CHIP	1MF		16V
C1124	1-126-397-11	ELECT CHIP	33MF	20%	25V
C1126	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C1127	1-126-405-11	ELECT CHIP	10MF	20%	50V
C1128	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C1129	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C1130	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C1131	1-104-760-11	CERAMIC CHIP	0.047MF	10%	50V
C1132	1-104-760-11	CERAMIC CHIP	0.047MF	10%	50V
C1133	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C1134	1-104-760-11	CERAMIC CHIP	0.047MF	10%	50V
C1135	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C1138	1-104-760-11	CERAMIC CHIP	0.047MF	10%	50V
C1139	1-104-760-11	CERAMIC CHIP	0.047MF	10%	50V
C1140	1-126-405-11	ELECT CHIP	10MF	20%	50V
C1142	1-126-402-11	ELECT CHIP	2.2MF	20%	50V
C1143	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1144	1-163-143-00	CERAMIC CHIP	0.0012MF	5%	50V
C1145	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C1146	1-126-405-11	ELECT CHIP	10MF	20%	50V
C1147	1-126-405-11	ELECT CHIP	10MF	20%	50V
C1148	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C1149	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C1150	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C1151	1-163-023-00	CERAMIC CHIP	0.015MF	10%	50V
C1152	1-126-405-11	ELECT CHIP	10MF	20%	50V
C1153	1-164-344-11	CERAMIC CHIP	0.068MF	10%	25V
C1154	1-126-404-11	ELECT CHIP	4.7MF	20%	50V
C1155	1-126-404-11	ELECT CHIP	4.7MF	20%	50V
C1156	1-126-404-11	ELECT CHIP	4.7MF	20%	50V
C1157	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C1158	1-164-182-11	CERAMIC CHIP	0.0033MF	10%	50V
C1159	1-128-235-11	ELECT CHIP	0.47MF	20%	50V
C1160	1-162-638-11	CERAMIC CHIP	1MF		16V
C1162	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C1163	1-126-405-11	ELECT CHIP	10MF	20%	50V
C1165	1-126-394-11	ELECT CHIP	10MF	20%	16V
C1166	1-104-760-11	CERAMIC CHIP	0.047MF	10%	50V
C1167	1-104-760-11	CERAMIC CHIP	0.047MF	10%	50V
C1168	1-104-760-11	CERAMIC CHIP	0.047MF	10%	50V
C1169	1-126-405-11	ELECT CHIP	10MF	20%	50V
C1170	1-126-405-11	ELECT CHIP	10MF	20%	50V
C1171	1-126-405-11	ELECT CHIP	10MF	20%	50V
C1172	1-126-405-11	ELECT CHIP	10MF	20%	50V
C1174	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C1175	1-104-760-11	CERAMIC CHIP	0.047MF	10%	50V
C1176	1-104-760-11	CERAMIC CHIP	0.047MF	10%	50V
C1178	1-126-405-11	ELECT CHIP	10MF	20%	50V
C1179	1-104-760-11	CERAMIC CHIP	0.047MF	10%	50V
C1180	1-104-760-11	CERAMIC CHIP	0.047MF	10%	50V
C1181	1-126-400-11	ELECT CHIP	22MF	20%	35V
C1182	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C1183	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C1184	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C1192	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C1193	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C1194	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C1195	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C1196	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C1197	1-126-392-11	ELECT CHIP	100MF	20%	6.3V
C1500	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C1501	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C1502	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C1503	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C1504	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C1505	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C1506	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C1507	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V
C1508	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V

Rf.NO.	PART NO.	DESCRIPTION				REMARK
C1509	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1510	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1511	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1512	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1513	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1514	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1515	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1516	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1517	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1518	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1519	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1520	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1521	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1522	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1523	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1524	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1525	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1526	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1527	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1528	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1529	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1530	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1531	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1532	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1533	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1534	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1538	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1539	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1540	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1541	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1542	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1543	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1544	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1545	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1546	1-126-398-11	ELECT CHIP	4.7MF	20%	35V	
C1547	1-126-394-11	ELECT CHIP	10MF	20%	16V	(RVP-411D/411DM)
C1548	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1549	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1550	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1551	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1552	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1553	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1554	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1555	1-107-725-11	CERAMIC CHIP	0.1MF	10%	16V	
C1556	1-126-401-11	ELECT CHIP	1MF	20%	50V	
C1557	1-126-401-11	ELECT CHIP	1MF	20%	50V	
C1558	1-126-401-11	ELECT CHIP	1MF	20%	50V	
C1559	1-126-401-11	ELECT CHIP	1MF	20%	50V	
C1560	1-126-401-11	ELECT CHIP	1MF	20%	50V	
C1561	1-126-401-11	ELECT CHIP	1MF	20%	50V	
	<DIODE>					
D1001	8-719-801-78	DIODE 1SS184				
D1002	8-719-801-78	DIODE 1SS184				
D1004	8-719-800-76	DIODE 1SS226				
D1005	8-719-800-76	DIODE 1SS226				
D1006	8-719-800-76	DIODE 1SS226				

Rf.NO.	PART NO.	DESCRIPTION	REMARK
D1007	8-719-800-76	DIODE 1SS226	
D1010	8-719-800-76	DIODE 1SS226	
D1011	8-719-801-78	DIODE 1SS184	
D1012	8-719-800-76	DIODE 1SS226	
D1013	8-719-801-78	DIODE 1SS184	
D1014	8-719-053-40	DIODE SC016-2-TE12RA	
D1015	8-719-801-78	DIODE 1SS184	
D1016	8-719-801-78	DIODE 1SS184	
D1017	8-719-801-78	DIODE 1SS184	
D1020	8-719-801-78	DIODE 1SS184	
D1021	8-719-801-78	DIODE 1SS184	
D1022	8-719-053-40	DIODE SC016-2-TE12RA	
D1023	8-719-053-40	DIODE SC016-2-TE12RA	
D1024	8-719-053-40	DIODE SC016-2-TE12RA	
D1025	8-719-053-40	DIODE SC016-2-TE12RA	
D1026	8-719-801-78	DIODE 1SS184	
D1500	8-719-801-78	DIODE 1SS184	
D1501	8-719-978-04	DIODE DTZ-TT11-3.3B	(RVP-411D/411DM)
D1502	8-719-978-04	DIODE DTZ-TT11-3.3B	(RVP-411D/411DM)
D1503	8-719-800-76	DIODE 1SS226	
D1504	8-719-800-76	DIODE 1SS226	
	<FILTER>		
FL1001	1-235-096-00	FILTER, LINE	
FL1002	1-239-558-11	FILTER, CHIP EMI	
FL1003	1-239-558-11	FILTER, CHIP EMI	
FL1004	1-239-558-11	FILTER, CHIP EMI	
FL1005	1-239-558-11	FILTER, CHIP EMI	
FL1500	1-235-096-00	FILTER, LINE	
FL1501	1-239-035-11	FILTER, EMI (CHIP)	
FL1502	1-239-035-11	FILTER, EMI (CHIP)	
FL1503	1-239-035-11	FILTER, EMI (CHIP)	
	<IC>		
IC1001	8-759-144-82	IC uPC2405HF	
	4-382-854-11	SCREW (M3X10), P, SW (+) ; IC1001	
IC1002	8-759-247-67	IC LM2990T-5.0	
IC1003	8-759-390-38	IC uPC24M12AHF	
	4-382-854-11	SCREW (M3X10), P, SW (+) ; IC1003	
IC1004	8-759-231-58	IC TA7812S	
IC1005	8-759-267-25	IC LM2940T-9.0	
IC1006	8-759-333-80	IC LM2990T-12	
IC1007	8-759-431-39	IC MAX8213BCSE-TE2	
IC1008	8-759-634-10	IC M52001SP	
IC1010	8-759-981-48	IC TL082M	
IC1011	8-759-360-07	IC BA7657F-E2	
IC1012	8-752-075-54	IC CXA3069S	
IC1013	8-759-360-07	IC BA7657F-E2	
IC1014	8-759-258-91	IC M52321SP	
IC1015	8-759-460-89	IC LT1260CS	
IC1016	8-759-103-09	IC uPC4082G2	
IC1017	8-759-105-49	IC uPC319G2	
IC1018	8-759-239-58	IC TC74HC221AF-TP2	
IC1019	8-752-072-94	IC CXA1875AM-T4	
IC1020	8-752-072-94	IC CXA1875AM-T4	
IC1021	8-752-072-94	IC CXA1875AM-T4	
IC1022	8-752-072-94	IC CXA1875AM-T4	
IC1023	8-759-232-74	IC TC74HC163AF	

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Rf.NO.	PART NO.	DESCRIPTION	REMARK
IC1024	8-759-032-14	IC MC74HC08AF	
IC1025	8-759-235-06	IC TC74HC02AF-TP2	
IC1026	8-759-230-99	IC TC74HC4053AF-TP2	
IC1027	8-759-232-65	IC TC74HC157AF	
IC1029	8-759-981-48	IC TL082M	
IC1030	8-759-144-82	IC uPC2405HF	
	4-382-854-11	SCREW (M3X10), P, SW (+) ; IC1030	
IC1031	8-759-235-14	IC TC74HC04AF-TP2	
IC1040	8-759-925-85	IC SN74HC32ANS	
IC1050	8-759-925-85	IC SN74HC32ANS	
IC1060	8-759-232-02	IC TC74HC00AF	
IC1070	8-759-941-17	IC SN74LS06NS	
IC1080	8-759-232-16	IC TC74HC14AF	
IC1500	8-759-237-79	IC TC74HC595AF(EL)	
IC1501	8-759-237-79	IC TC74HC595AF(EL)	
IC1502	8-759-233-56	IC TC74HC688AF	
IC1503	8-759-244-00	IC TC74AC161F	
IC1504	8-759-244-00	IC TC74AC161F	
IC1505	8-759-233-56	IC TC74HC688AF	
IC1506	8-759-244-00	IC TC74AC161F	
IC1507	8-759-244-00	IC TC74AC161F	
IC1511	8-759-245-77	IC TC74ACT574F	
IC1512	8-759-245-77	IC TC74ACT574F	
IC1513	8-759-245-77	IC TC74ACT574F	
IC1514	8-752-338-46	IC CXD1178Q	
IC1515	8-759-245-77	IC TC74ACT574F	
IC1516	8-759-245-77	IC TC74ACT574F	
IC1517	8-759-232-65	IC TC74HC157AF	
IC1518	8-759-232-65	IC TC74HC157AF	
IC1519	8-759-232-65	IC TC74HC157AF	
IC1520	8-759-232-65	IC TC74HC157AF	
IC1521	8-759-244-00	IC TC74AC161F	
IC1522	8-759-244-00	IC TC74AC161F	
IC1523	8-759-244-00	IC TC74AC161F	
IC1524	8-759-244-00	IC TC74AC161F	
IC1525	8-759-232-65	IC TC74HC157AF	
IC1526	8-759-243-09	IC TC74AC74F	
IC1527	8-759-243-09	IC TC74AC74F	
IC1528	8-759-243-62	IC TC74AC32F	
IC1529	8-759-243-50	IC TC74AC08F	
IC1530	8-759-243-09	IC TC74AC74F	
IC1531	8-759-243-09	IC TC74AC74F	
IC1532	8-759-243-09	IC TC74AC74F	
IC1533	8-759-243-09	IC TC74AC74F	
IC1534	8-759-243-09	IC TC74AC74F	
IC1535	8-759-460-88	IC EL2444CS	
IC1536	8-759-451-53	IC EL4094CS-TE2	
IC1537	8-759-451-53	IC EL4094CS-TE2	
IC1538	8-759-451-53	IC EL4094CS-TE2	
IC1539	8-759-243-58	IC TC74AC14F	
IC1540	8-759-073-52	IC TC74AC04F-EL	
IC1541	8-759-243-43	IC TC74AC02F	
IC1542	8-759-073-52	IC TC74AC04F-EL	
		<JACK>	
J1001	1-507-251-13	JACK	
J1002	1-507-251-13	JACK	

Rf.NO.	PART NO.	DESCRIPTION			REMARK
		<COIL>			
L1001	1-412-525-31	INDUCTOR 10UH			
L1002	1-412-525-31	INDUCTOR 10UH			
		<TRANSISTOR>			
Q1001	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L			
Q1002	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L			
Q1003	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L			
Q1004	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1005	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q1006	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q1020	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L			
Q1021	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L			
Q1022	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1023	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L			
Q1024	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L			
Q1025	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1027	8-729-320-62	TRANSISTOR 2SD789-34			
Q1028	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q1031	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1032	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q1033	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q1034	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q1035	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1036	8-729-216-22	TRANSISTOR 2SA1162-G			
		<RESISTOR>			
R1001	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1002	1-216-105-91	METAL GLAZE	220K	5%	1/10W
R1003	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1004	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1005	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1006	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1007	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1008	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1009	1-216-117-00	METAL GLAZE	680K	5%	1/10W
R1010	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1011	1-216-029-00	METAL GLAZE	150	5%	1/10W
R1012	1-216-029-00	METAL GLAZE	150	5%	1/10W
R1013	1-216-029-00	METAL GLAZE	150	5%	1/10W
R1014	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R1017	1-216-295-91	CONDUCTOR, CHIP			
R1020	1-216-105-91	METAL GLAZE	220K	5%	1/10W
R1021	1-216-105-91	METAL GLAZE	220K	5%	1/10W
R1022	1-216-105-91	METAL GLAZE	220K	5%	1/10W
R1023	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R1024	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R1025	1-216-673-11	METAL CHIP	8.2K	0.50%	1/10W
R1026	1-216-673-11	METAL CHIP	8.2K	0.50%	1/10W
R1027	1-216-673-11	METAL CHIP	8.2K	0.50%	1/10W
R1028	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1029	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R1030	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1031	1-216-670-11	METAL CHIP	6.2K	0.50%	1/10W
R1032	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R1033	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R1034	1-216-073-00	METAL GLAZE	10K	5%	1/10W

Rf.NO.	PART NO.	DESCRIPTION			REMARK
R1035	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R1036	1-216-037-00	METAL GLAZE	330	5%	1/10W
R1037	1-216-672-11	METAL CHIP	7.5K	0.50%	1/10W
R1038	1-216-689-11	METAL CHIP	39K	0.50%	1/10W
R1040	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1041	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1042	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1043	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W
R1044	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W
R1045	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W
R1046	1-216-001-00	METAL GLAZE	10	5%	1/10W
R1047	1-216-001-00	METAL GLAZE	10	5%	1/10W
R1048	1-216-001-00	METAL GLAZE	10	5%	1/10W
R1050	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R1051	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R1052	1-216-615-11	METAL CHIP	33	0.50%	1/10W
R1053	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R1054	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R1055	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R1056	1-216-615-11	METAL CHIP	33	0.50%	1/10W
R1057	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R1058	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R1059	1-216-615-11	METAL CHIP	33	0.50%	1/10W
R1061	1-216-013-00	METAL GLAZE	33	5%	1/10W
R1063	1-216-013-00	METAL GLAZE	33	5%	1/10W
R1065	1-216-013-00	METAL GLAZE	33	5%	1/10W
R1067	1-216-013-00	METAL GLAZE	33	5%	1/10W
R1069	1-216-013-00	METAL GLAZE	33	5%	1/10W
R1071	1-216-013-00	METAL GLAZE	33	5%	1/10W
R1072	1-216-013-00	METAL GLAZE	33	5%	1/10W
R1073	1-216-013-00	METAL GLAZE	33	5%	1/10W
R1074	1-216-013-00	METAL GLAZE	33	5%	1/10W
R1075	1-216-013-00	METAL GLAZE	33	5%	1/10W
R1076	1-216-013-00	METAL GLAZE	33	5%	1/10W
R1077	1-216-013-00	METAL GLAZE	33	5%	1/10W
R1078	1-216-013-00	METAL GLAZE	33	5%	1/10W
R1079	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R1080	1-216-013-00	METAL GLAZE	33	5%	1/10W
R1081	1-216-013-00	METAL GLAZE	33	5%	1/10W
R1082	1-216-013-00	METAL GLAZE	33	5%	1/10W
R1083	1-216-013-00	METAL GLAZE	33	5%	1/10W
R1084	1-216-013-00	METAL GLAZE	33	5%	1/10W
R1085	1-216-013-00	METAL GLAZE	33	5%	1/10W
R1086	1-216-013-00	METAL GLAZE	33	5%	1/10W
R1087	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R1088	1-216-013-00	METAL GLAZE	33	5%	1/10W
R1089	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R1090	1-216-013-00	METAL GLAZE	33	5%	1/10W
R1091	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R1092	1-216-013-00	METAL GLAZE	33	5%	1/10W
R1093	1-216-013-00	METAL GLAZE	33	5%	1/10W
R1094	1-216-013-00	METAL GLAZE	33	5%	1/10W
R1095	1-216-001-00	METAL GLAZE	10	5%	1/10W
R1097	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1098	1-216-001-00	METAL GLAZE	10	5%	1/10W
R1099	1-216-001-00	METAL GLAZE	10	5%	1/10W
R1100	1-216-013-00	METAL GLAZE	33	5%	1/10W
R1101	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R1102	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R1103	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R1104	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R1105	1-216-045-00	METAL GLAZE	680	5%	1/10W
R1106	1-216-045-00	METAL GLAZE	680	5%	1/10W
R1107	1-216-045-00	METAL GLAZE	680	5%	1/10W
R1110	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1111	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1112	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1113	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1114	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1115	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1116	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1117	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1118	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1120	1-216-013-00	METAL GLAZE	33	5%	1/10W
R1123	1-216-013-00	METAL GLAZE	33	5%	1/10W
R1124	1-216-013-00	METAL GLAZE	33	5%	1/10W
R1127	1-216-013-00	METAL GLAZE	33	5%	1/10W
R1128	1-216-013-00	METAL GLAZE	33	5%	1/10W
R1129	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R1131	1-216-013-00	METAL GLAZE	33	5%	1/10W
R1135	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R1137	1-216-041-00	METAL GLAZE	470	5%	1/10W
R1138	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R1140	1-216-041-00	METAL GLAZE	470	5%	1/10W
R1141	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R1143	1-216-041-00	METAL GLAZE	470	5%	1/10W
R1144	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R1145	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R1146	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1147	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1148	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1149	1-216-041-00	METAL GLAZE	470	5%	1/10W
R1150	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R1151	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1152	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R1153	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1154	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R1155	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1156	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R1157	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1158	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R1159	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R1160	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1161	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1162	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1163	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1164	1-216-095-00	METAL GLAZE	82K	5%	1/10W
R1165	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1166	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R1167	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1168	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R1169	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R1170	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R1171	1-216-013-00	METAL GLAZE	33	5%	1/10W
R1172	1-216-013-00	METAL GLAZE	33	5%	1/10W
R1173	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1175	1-216-013-00	METAL GLAZE	33	5%	1/10W
R1176	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1177	1-216-035-00	METAL GLAZE	270	5%	1/10W
R1178	1-216-049-91	METAL GLAZE	1K	5%	1/10W

A

Rf.NO.	PART NO.	DESCRIPTION	REMARK
R1179	1-216-035-00	METAL GLAZE 270 5% 1/10W	
R1180	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1181	1-216-035-00	METAL GLAZE 270 5% 1/10W	
R1182	1-216-629-11	METAL CHIP 120 0.50% 1/10W	
R1183	1-216-629-11	METAL CHIP 120 0.50% 1/10W	
R1184	1-216-629-11	METAL CHIP 120 0.50% 1/10W	
R1185	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R1186	1-216-013-00	METAL GLAZE 33 5% 1/10W	
R1187	1-216-013-00	METAL GLAZE 33 5% 1/10W	
R1188	1-216-013-00	METAL GLAZE 33 5% 1/10W	
R1189	1-216-013-00	METAL GLAZE 33 5% 1/10W	
R1190	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R1191	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R1192	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R1193	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R1194	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R1195	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R1196	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R1197	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R1198	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R1199	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R1203	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1204	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1205	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W	
R1206	1-216-097-91	METAL GLAZE 100K 5% 1/10W	
R1207	1-216-097-91	METAL GLAZE 100K 5% 1/10W	
R1208	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1214	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R1215	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R1216	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R1219	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R1220	1-216-037-00	METAL GLAZE 330 5% 1/10W	
R1221	1-216-685-11	METAL CHIP 27K 0.50% 1/10W	
R1222	1-216-679-11	METAL CHIP 15K 0.50% 1/10W	
R1223	1-216-085-00	METAL GLAZE 33K 5% 1/10W	
R1224	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1227	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1228	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1229	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1230	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1231	1-216-097-91	METAL GLAZE 100K 5% 1/10W	
R1232	1-216-077-00	METAL GLAZE 15K 5% 1/10W	
R1233	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R1242	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R1243	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R1244	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1245	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1246	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1247	1-216-678-11	METAL CHIP 13K 0.50% 1/10W	
R1249	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1250	1-216-001-00	METAL GLAZE 10 5% 1/10W	
R1251	1-216-001-00	METAL GLAZE 10 5% 1/10W	
R1252	1-216-097-91	METAL GLAZE 100K 5% 1/10W	
R1253	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R1254	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R1256	1-216-659-11	METAL CHIP 2.2K 0.50% 1/10W	
R1257	1-216-659-11	METAL CHIP 2.2K 0.50% 1/10W	
R1258	1-216-659-11	METAL CHIP 2.2K 0.50% 1/10W	
R1259	1-216-686-11	METAL CHIP 30K 0.50% 1/10W	
R1260	1-216-664-11	METAL CHIP 3.6K 0.50% 1/10W	
R1261	1-216-097-91	METAL GLAZE 100K 5% 1/10W	
R1262	1-216-095-00	METAL GLAZE 82K 5% 1/10W	
R1263	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1264	1-216-675-11	METAL CHIP 10K 0.50% 1/10W	
R1265	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R1266	1-216-675-11	METAL CHIP 10K 0.50% 1/10W	
R1267	1-216-679-11	METAL CHIP 15K 0.50% 1/10W	
R1268	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R1269	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R1270	1-216-097-91	METAL GLAZE 100K 5% 1/10W	
R1271	1-216-097-91	METAL GLAZE 100K 5% 1/10W	
R1272	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R1273	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1274	1-216-097-91	METAL GLAZE 100K 5% 1/10W	
R1275	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R1276	1-216-295-91	CONDUCTOR, CHIP	
R1279	1-216-013-00	METAL GLAZE 33 5% 1/10W	
R1290	1-216-295-91	CONDUCTOR, CHIP	
R1292	1-216-295-91	CONDUCTOR, CHIP	
R1294	1-216-295-91	CONDUCTOR, CHIP	
R1296	1-216-295-91	CONDUCTOR, CHIP	
R1297	1-216-295-91	CONDUCTOR, CHIP	
R1298	1-216-295-91	CONDUCTOR, CHIP	
R1500	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1501	1-216-063-91	METAL GLAZE 3.9K 5% 1/10W	
R1502	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R1503	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R1504	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R1505	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R1506	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W	
R1507	1-216-025-91	METAL GLAZE 100 5% 1/10W	(RVP-411D/411DM)
R1508	1-216-046-00	METAL GLAZE 750 5% 1/10W	(RVP-411D/411DM)
R1508	1-216-062-00	METAL GLAZE 3.6K 5% 1/10W	(EXCEPT RVP-411D/411DM)
R1509	1-216-035-00	METAL GLAZE 270 5% 1/10W	(RVP-411D/411DM)
R1509	1-216-049-91	METAL GLAZE 1K 5% 1/10W	(EXCEPT RVP-411D/411DM)
R1510	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R1511	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1512	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1513	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1514	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R1515	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R1516	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R1517	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R1518	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R1519	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R1520	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R1521	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R1523	1-216-047-91	METAL GLAZE 820 5% 1/10W	
R1526	1-216-047-91	METAL GLAZE 820 5% 1/10W	
R1527	1-216-047-91	METAL GLAZE 820 5% 1/10W	
R1528	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	(RVP-411D/411DM)
R1528	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W	(EXCEPT RVP-411D/411DM)
R1529	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	(RVP-411D/411DM)

Rf.NO.	PART NO.	DESCRIPTION	REMARK
R1529	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W	(EXCEPT RVP-411D/411DM)
R1530	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	(RVP-411D/411DM)
R1530	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W	(EXCEPT RVP-411D/411DM)
R1531	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R1532	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R1533	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R1534	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R1535	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R1536	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R1537	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R1538	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R1539	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R1540	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R1541	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R1542	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R1543	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R1544	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R1545	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R1546	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R1547	1-216-665-11	METAL CHIP 3.9K 0.50% 1/10W	
R1548	1-216-665-11	METAL CHIP 3.9K 0.50% 1/10W	
R1549	1-216-665-11	METAL CHIP 3.9K 0.50% 1/10W	
R1550	1-216-693-11	METAL CHIP 56K 0.50% 1/10W	
R1551	1-216-001-00	METAL GLAZE 10 5% 1/10W	
R1552	1-216-295-91	CONDUCTOR, CHIP	
R1553	1-216-001-00	METAL GLAZE 10 5% 1/10W	
R1554	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R1555	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R1556	1-216-091-00	METAL GLAZE 56K 5% 1/10W	
R1558	1-216-025-91	METAL GLAZE 100 5% 1/10W	(RVP-411D/411DM)
R1558	1-216-049-91	METAL GLAZE 1K 5% 1/10W	(EXCEPT RVP-411D/411DM)
R1559	1-216-025-91	METAL GLAZE 100 5% 1/10W	(RVP-411D/411DM)
R1559	1-216-049-91	METAL GLAZE 1K 5% 1/10W	(EXCEPT RVP-411D/411DM)
R1560	1-216-025-91	METAL GLAZE 100 5% 1/10W	(RVP-411D/411DM)
R1560	1-216-049-91	METAL GLAZE 1K 5% 1/10W	(EXCEPT RVP-411D/411DM)
R1600	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1601	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R1602	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
	<VARIABLE RESISTOR>		
RV1500	1-241-760-11	RES, ADJ, CARBON 470	(RVP-411D/411DM)
	<RELAY>		
RY1001	1-515-757-11	RELAY	
	<SWITCH>		
S1001	1-553-977-00	SWITCH, SLIDE	
S1002	1-570-865-11	SWITCH, SLIDE	
S1003	1-553-977-00	SWITCH, SLIDE	
S1503	1-570-728-11	SWITCH, DIP	
S1504	1-570-728-11	SWITCH, DIP	
	<TERMINAL BOARD>		
TB1001	1-779-506-11	CONNECTOR, BNC (RECEPTACLE)	

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Rf.NO.	PART NO.	DESCRIPTION	REMARK
	* A-1306-547-A	M BOARD, COMPLETE	(RVP-411D/411DM)
	* A-1306-560-A	M BOARD, COMPLETE	(EXCEPT RVP-411D/411DM)

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Rf.NO.	PART NO.	DESCRIPTION	REMARK
	1-251-047-11	SOCKET, IC	
	* 1-526-659-00	SOCKET, IC (DP) 28P	
	* 1-540-212-11	SOCKET (ROTARY SWITCH)	
	4-334-240-00	HOLDER, LED	
	3-531-576-11	RIVET	
	3-724-182-01	NUT (SMALL JACK), M6	
	* 4-058-569-01	PANEL, M	
	7-682-948-01	SCREW +PSW 3X8	
	<CAPACITOR>		
C2001	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2002	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2003	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C2004	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C2005	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2006	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2007	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2008	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2009	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2010	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2011	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2012	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2013	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2014	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2015	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2016	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2026	1-128-013-11	ELECT CHIP 1MF 20% 50V	
C2027	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2028	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2030	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2033	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2035	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2038	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2039	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2040	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2041	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2043	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2044	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2045	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2046	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2047	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2048	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2049	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2050	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2051	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	

M

Rf.NO.	PART NO.	DESCRIPTION	REMARK
C2052	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2053	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2054	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2055	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2057	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C2058	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C2059	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2060	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2061	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2062	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2064	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2065	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2066	1-104-661-91	ELECT 330MF 20% 16V	
C2067	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2068	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2072	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2073	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2076	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2077	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2078	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2079	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2080	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2081	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2082	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2083	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2084	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2085	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2086	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2087	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2088	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2089	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2090	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2091	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2092	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2093	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2094	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2095	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2096	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2097	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2098	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2101	1-126-396-11	ELECT CHIP 47MF 20% 16V	
C2102	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C2103	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2104	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2105	1-163-129-00	CERAMIC CHIP 330PF 5% 50V	
C2106	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2107	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2501	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C2502	1-128-013-11	ELECT CHIP 1MF 20% 50V	
C2503	1-128-013-11	ELECT CHIP 1MF 20% 50V	
C2504	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2505	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2506	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2507	1-128-013-11	ELECT CHIP 1MF 20% 50V	
C2508	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C2509	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2510	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2511	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C2512	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2513	1-128-013-11	ELECT CHIP 1MF 20% 50V	

Rf.NO.	PART NO.	DESCRIPTION	REMARK
C2514	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2515	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2516	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2517	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C2518	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C2519	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2520	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2521	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2522	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2523	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2524	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2527	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C2528	1-128-004-11	ELECT CHIP 10MF 20% 16V	
C2600	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2601	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2602	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2603	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2604	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2605	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2606	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2607	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2608	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2609	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C2610	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2611	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2612	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2613	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2614	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2615	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2616	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2617	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2618	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2619	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2620	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2621	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2622	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2623	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2624	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2625	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2626	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2627	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2628	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C2629	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
		<CONNECTOR>	
CN2001	1-573-005-21	CONNECTOR, D-SUB(ANGLE TYPE)9P	
CN2002	1-573-005-21	CONNECTOR, D-SUB(ANGLE TYPE)9P	
		<DIODE>	
D2001	8-719-920-66	DIODE SLR-54VC12	
D2002	8-719-955-04	DIODE PY5504S-1	
D2003	8-719-800-76	DIODE 1SS226	
D2004	8-719-800-76	DIODE 1SS226	
D2005	8-719-800-76	DIODE 1SS226	
D2006	8-719-800-76	DIODE 1SS226	
D2007	8-719-800-76	DIODE 1SS226	
D2008	8-719-800-76	DIODE 1SS226	
D2009	8-719-800-76	DIODE 1SS226	

Rf.NO.	PART NO.	DESCRIPTION	REMARK
D2010	8-719-800-76	DIODE 1SS226	
D2011	8-719-962-02	DIODE GL-6P202	
D2020	8-719-800-76	DIODE 1SS226	
D2021	8-719-800-76	DIODE 1SS226	
D2022	8-719-800-76	DIODE 1SS226	
D2023	8-719-800-76	DIODE 1SS226	
D2024	8-719-800-76	DIODE 1SS226	
D2025	8-719-800-76	DIODE 1SS226	
D2026	8-719-800-76	DIODE 1SS226	
D2027	8-719-800-76	DIODE 1SS226	
D2028	8-719-800-76	DIODE 1SS226	
D2029	8-719-800-76	DIODE 1SS226	
D2030	8-719-800-76	DIODE 1SS226	
D2031	8-719-800-76	DIODE 1SS226	
D2032	8-719-976-99	DIODE DTZ-TT11-5.1	
	<FERRITE BEAD>		
FB2001	1-412-390-21	INDUCTOR CHIP 0UH	
FB2002	1-412-390-21	INDUCTOR CHIP 0UH	
FB2003	1-412-390-21	INDUCTOR CHIP 0UH	
FB2004	1-412-390-21	INDUCTOR CHIP 0UH	
FB2005	1-412-390-21	INDUCTOR CHIP 0UH	
FB2006	1-412-390-21	INDUCTOR CHIP 0UH	
FB2007	1-412-390-21	INDUCTOR CHIP 0UH	
FB2008	1-412-390-21	INDUCTOR CHIP 0UH	
FB2009	1-412-390-21	INDUCTOR CHIP 0UH	
FB2010	1-412-390-21	INDUCTOR CHIP 0UH	
FB2011	1-412-390-21	INDUCTOR CHIP 0UH	
FB2012	1-412-390-21	INDUCTOR CHIP 0UH	
FB2013	1-412-390-21	INDUCTOR CHIP 0UH	
FB2014	1-412-390-21	INDUCTOR CHIP 0UH	
FB2015	1-412-390-21	INDUCTOR CHIP 0UH	
FB2016	1-412-390-21	INDUCTOR CHIP 0UH	
FB2017	1-412-390-21	INDUCTOR CHIP 0UH	
FB2018	1-412-390-21	INDUCTOR CHIP 0UH	
FB2019	1-412-390-21	INDUCTOR CHIP 0UH	
FB2020	1-412-390-21	INDUCTOR CHIP 0UH	
FB2021	1-412-390-21	INDUCTOR CHIP 0UH	
FB2022	1-412-390-21	INDUCTOR CHIP 0UH	
FB2023	1-412-390-21	INDUCTOR CHIP 0UH	
FB2024	1-412-390-21	INDUCTOR CHIP 0UH	
FB2025	1-412-390-21	INDUCTOR CHIP 0UH	
FB2026	1-412-390-21	INDUCTOR CHIP 0UH	
FB2027	1-412-390-21	INDUCTOR CHIP 0UH	
FB2028	1-412-390-21	INDUCTOR CHIP 0UH	
FB2029	1-412-390-21	INDUCTOR CHIP 0UH	
FB2030	1-412-390-21	INDUCTOR CHIP 0UH	
FB2031	1-412-390-21	INDUCTOR CHIP 0UH	
FB2032	1-412-390-21	INDUCTOR CHIP 0UH	
FB2033	1-412-390-21	INDUCTOR CHIP 0UH	
FB2034	1-412-390-21	INDUCTOR CHIP 0UH	
FB2035	1-412-390-21	INDUCTOR CHIP 0UH	
FB2036	1-412-390-21	INDUCTOR CHIP 0UH	
FB2037	1-412-390-21	INDUCTOR CHIP 0UH	
FB2038	1-412-390-21	INDUCTOR CHIP 0UH	
FB2039	1-412-390-21	INDUCTOR CHIP 0UH	
FB2040	1-412-390-21	INDUCTOR CHIP 0UH	
FB2041	1-412-390-21	INDUCTOR CHIP 0UH	

Rf.NO.	PART NO.	DESCRIPTION	REMARK
	<FILTER>		
FL2001	1-233-283-11	FILTER, EMI (SMD)	
FL2002	1-233-283-11	FILTER, EMI (SMD)	
FL2003	1-233-283-11	FILTER, EMI (SMD)	
FL2004	1-233-283-11	FILTER, EMI (SMD)	
FL2005	1-233-283-11	FILTER, EMI (SMD)	
FL2006	1-233-283-11	FILTER, EMI (SMD)	
FL2008	1-239-558-11	FILTER, CHIP EMI	
FL2010	1-233-283-11	FILTER, EMI (SMD)	
FL2011	1-233-283-11	FILTER, EMI (SMD)	
FL2012	1-233-283-11	FILTER, EMI (SMD)	
FL2013	1-239-558-11	FILTER, CHIP EMI	
FL2014	1-235-096-00	FILTER, LINE	
	<IC>		
IC2001	8-759-275-96	IC HD6413003RF-12	
IC2002	8-759-447-40	IC MAX706CSA	
IC2003	8-759-495-44	IC AM27C2048-RVP1.02	(RVP-411D/411DM)
IC2003	8-759-522-47	IC AM27C2048-RVP1.10	(EXCEPT RVP-411D/411DM)
IC2004	8-759-497-29	IC LC35256DM-70-TLM	
IC2005	8-759-485-52	IC HN58C256AP-10	
IC2009	8-759-322-47	IC HD63484CP8	
IC2014	8-759-154-60	IC uPD71055GB-10-3B4	
IC2017	8-759-486-27	IC MB90091A-133	
IC2020	8-759-348-82	IC LTC491CS-E2	
IC2021	8-759-389-87	IC PC16550DV-FL63	
IC2025	8-759-242-28	IC TC74HC4511AF	
IC2026	8-759-242-28	IC TC74HC4511AF	
IC2027	8-759-247-68	IC PCF8584T	
IC2028	8-759-247-68	IC PCF8584T	
IC2030	8-759-925-78	IC SN74HC10ANS	
IC2031	8-759-926-11	IC SN74HC138ANS	
IC2032	8-759-925-74	IC SN74HC04ANS	
IC2033	8-759-925-85	IC SN74HC32ANS	
IC2034	8-759-232-52	IC MC74HC133AF	
IC2035	8-759-926-18	IC SN74HC157ANS	
IC2036	8-759-925-80	IC SN74HC14ANS	
IC2037	8-759-925-90	IC SN74HC74ANS	
IC2038	8-759-925-85	IC SN74HC32ANS	
IC2039	8-759-925-90	IC SN74HC74ANS	
IC2040	8-759-239-55	IC TC74HC123AF	
IC2041	8-759-244-75	IC TC74AC541F	
IC2042	8-759-244-71	IC TC74AC540F	
IC2043	8-759-423-27	IC MC74AC163MEL	
IC2044	8-759-243-39	IC TC74AC00F	
IC2045	8-759-423-33	IC MC74AC74MEL	
IC2046	8-759-232-74	IC TC74HC163AF	
IC2047	8-759-073-52	IC TC74AC04F-EL	
IC2048	8-759-925-90	IC SN74HC74ANS	
IC2049	8-759-423-33	IC MC74AC74MEL	
IC2050	8-759-936-31	IC SN74AS30NS	
IC2051	8-759-926-06	IC SN74HC126ANS	
IC2052	8-759-925-90	IC SN74HC74ANS	
IC2053	8-759-237-71	IC TC74HC573AF(EL)	
IC2054	8-759-237-71	IC TC74HC573AF(EL)	
IC2055	8-759-927-15	IC SN74HCT245ANS	

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Rf.NO.	PART NO.	DESCRIPTION	REMARK
IC2056	8-759-927-15	IC SN74HCT245ANS	
IC2057	8-759-387-78	IC TC551664AJ-20	
IC2058	8-759-389-01	IC SN74ALS166NS-E20	
IC2059	8-759-389-01	IC SN74ALS166NS-E20	
IC2060	8-759-423-33	IC MC74AC74MEL	
IC2061	8-759-423-32	IC MC74AC32MEL	
IC2062	8-759-243-50	IC TC74AC08F	
IC2063	8-759-295-09	IC TLC2932IPW	
IC2064	8-759-232-74	IC TC74HC163AF	
IC2065	8-759-232-74	IC TC74HC163AF	
IC2066	8-759-423-32	IC MC74AC32MEL	
IC2067	8-759-009-10	IC MC14069UBF	
IC2068	8-759-232-74	IC TC74HC163AF	
IC2069	8-752-334-64	IC CXD1171M	
IC2070	8-759-925-90	IC SN74HC74ANS	
IC2071	8-759-239-58	IC TC74HC221AF	
IC2072	8-759-424-17	IC MC74HC112FEL	
IC2073	8-759-239-23	IC TC74HC86AF	
IC2600	8-759-243-50	IC TC74AC08F	
IC2601	8-759-925-74	IC SN74HC04ANS	
IC2602	8-759-423-32	IC MC74AC32MEL	
IC2603	8-759-926-11	IC SN74HC138ANS	
IC2604	8-759-926-82	IC SN74HC574ANS	
IC2605	8-759-244-12	IC TC74AC175F	
IC2606	8-759-423-33	IC MC74AC74MEL	
IC2607	8-759-243-39	IC TC74AC00F	
IC2608	8-759-423-27	IC MC74AC163MEL	
IC2609	8-759-423-27	IC MC74AC163MEL	
IC2610	8-759-926-82	IC SN74HC574ANS	
IC2611	8-759-423-33	IC MC74AC74MEL	
IC2612	8-759-925-79	IC SN74HC11ANS	
IC2613	8-759-423-27	IC MC74AC163MEL	
IC2614	8-759-423-27	IC MC74AC163MEL	
IC2615	8-759-423-27	IC MC74AC163MEL	
IC2616	8-759-926-82	IC SN74HC574ANS	
IC2617	8-759-007-80	IC MC74HC175F	
IC2618	8-759-925-90	IC SN74HC74ANS	
IC2619	8-759-927-46	IC SN74HC00ANS	
IC2620	8-759-232-74	IC TC74HC163AF	
IC2621	8-759-232-74	IC TC74HC163AF	
IC2622	8-759-926-82	IC SN74HC574ANS	
IC2623	8-759-926-18	IC SN74HC157ANS	
IC2624	8-759-926-82	IC SN74HC574ANS	
IC2625	8-759-925-90	IC SN74HC74ANS	
IC2626	8-759-232-74	IC TC74HC163AF	
IC2627	8-759-232-74	IC TC74HC163AF	
IC2628	8-759-232-74	IC TC74HC163AF	
		<JACK>	
J2001	1-779-626-11	JACK	
J2002	1-779-626-11	JACK	
		<CHIP CONDUCTOR>	
JR2001	1-216-295-91	CONDUCTOR, CHIP	
JR2002	1-216-295-91	CONDUCTOR, CHIP	
JR2003	1-216-295-91	CONDUCTOR, CHIP	
JR2004	1-216-295-91	CONDUCTOR, CHIP	
JR2005	1-216-295-91	CONDUCTOR, CHIP	

Rf.NO.	PART NO.	DESCRIPTION	REMARK
JR2006	1-216-295-91	CONDUCTOR, CHIP	
JR2007	1-216-295-91	CONDUCTOR, CHIP	
JR2008	1-216-295-91	CONDUCTOR, CHIP	
JR2500	1-216-296-91	CONDUCTOR, CHIP	
JR2502	1-216-296-91	CONDUCTOR, CHIP	
		<COIL>	
L2002	1-410-204-31	INDUCTOR CHIP 10UH	
L2003	1-410-204-31	INDUCTOR CHIP 10UH	
L2004	1-410-204-31	INDUCTOR CHIP 10UH	
L2005	1-410-204-31	INDUCTOR CHIP 10UH	
		<TRANSISTOR>	
Q2001	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q2002	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q2003	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q2004	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q2005	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q2006	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q2007	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
		<RESISTOR>	
R2001	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R2002	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R2003	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R2004	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R2005	1-216-037-00	METAL GLAZE 330 5% 1/10W	
R2006	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R2007	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R2008	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R2009	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R2010	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R2011	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R2012	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R2013	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R2014	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R2015	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R2016	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R2017	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R2018	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R2019	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R2021	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R2022	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R2024	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R2025	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R2026	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R2027	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R2028	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R2029	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R2030	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R2031	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R2032	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R2033	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R2034	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R2035	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R2036	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R2037	1-216-073-00	METAL GLAZE 10K 5% 1/10W	

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Rf.NO.	PART NO.	DESCRIPTION			REMARK
R2038	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2039	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2040	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2041	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2042	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2043	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2045	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2046	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2047	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2049	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2050	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2051	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2052	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2053	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2054	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2055	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2056	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2057	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2058	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2059	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2060	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2061	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2062	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2063	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2064	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2065	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2066	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2070	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2071	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2072	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2073	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2074	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2075	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2077	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2078	1-216-295-91	CONDUCTOR, CHIP			
R2079	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2080	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2081	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2082	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2083	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2084	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2085	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2086	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2087	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2088	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2089	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2090	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2091	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2092	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2093	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2094	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2095	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2096	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2097	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2098	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2099	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2100	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2101	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2102	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2103	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2104	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2105	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2106	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2107	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2108	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2109	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2110	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2111	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2112	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2113	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2114	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2115	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2116	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2117	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2118	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2119	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2120	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2121	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2122	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2123	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2124	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2125	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2126	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2127	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2128	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2129	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2130	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2131	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2132	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2133	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2134	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2135	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2136	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2138	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2139	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2140	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2141	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2142	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2143	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2144	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2145	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2146	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2147	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2148	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2149	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2150	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2151	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2152	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2153	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2154	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2155	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2156	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2157	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2158	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2159	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R2161	1-216-027-00	METAL GLAZE	120	5%	1/10W
R2162	1-216-023-00	METAL GLAZE	82	5%	1/10W
R2163	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R2164	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R2165	1-216-033-00	METAL GLAZE	220	5%	1/10W

Rf.NO.	PART NO.	DESCRIPTION			REMARK
R2166	1-216-013-00	METAL GLAZE	33	5%	1/10W
R2208	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2209	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2210	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2211	1-216-031-00	METAL GLAZE	180	5%	1/10W
R2212	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2213	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2214	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2216	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2218	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2221	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2225	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2226	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R2227	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R2228	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R2229	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R2230	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R2231	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R2232	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R2233	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R2234	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R2235	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R2236	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R2237	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R2238	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R2239	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R2240	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R2241	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R2242	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2243	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2244	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2245	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2246	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R2247	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R2248	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2249	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2250	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2253	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2265	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2266	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2267	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2268	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2269	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2270	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2271	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2272	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2273	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2274	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2275	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2276	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2277	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R2278	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2279	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2280	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2281	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2282	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2283	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2284	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2285	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2286	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2287	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2288	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2289	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2290	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2291	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2292	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2293	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2294	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2295	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2296	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2297	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2298	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2299	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2300	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2301	1-216-295-91	CONDUCTOR, CHIP			
R2303	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2304	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2305	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2306	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2307	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2308	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2309	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2310	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2311	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2312	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2313	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2314	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2315	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2316	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2317	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2318	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2319	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2320	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2321	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2322	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2323	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2324	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2325	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2326	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2327	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2328	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2329	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2330	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2331	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R2332	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R2333	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R2334	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R2335	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R2336	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R2337	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R2338	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R2339	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R2340	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R2341	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R2342	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R2343	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2348	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2349	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2362	1-216-295-91	CONDUCTOR, CHIP			
R2364	1-216-295-91	CONDUCTOR, CHIP			

Rf.NO.	PART NO.	DESCRIPTION			REMARK
R2365	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2366	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2367	1-216-021-00	METAL GLAZE	68	5%	1/10W
R2368	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2369	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2370	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2371	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2372	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2373	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2374	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2375	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2376	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2377	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2378	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2379	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2380	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2381	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2382	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2383	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2384	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2385	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2386	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2387	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2388	1-216-295-91	CONDUCTOR, CHIP			
R2389	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W
R2392	1-216-627-11	METAL GLAZE	100	0.50%	1/10W
R2393	1-216-631-11	METAL GLAZE	150	0.50%	1/10W
R2394	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2397	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2398	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2401	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2403	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2405	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2407	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2409	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2412	1-216-295-91	CONDUCTOR, CHIP			
R2414	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R2415	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R2416	1-216-037-00	METAL GLAZE	330	5%	1/10W
R2417	1-216-033-00	METAL GLAZE	220	5%	1/10W
R2418	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R2419	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2601	1-216-023-00	METAL GLAZE	82	5%	1/10W

<SWITCH>

S2001	1-570-898-11	SWITCH, SLIDE
S2003	1-572-853-11	SWITCH, ROTARY
S2004	1-572-853-11	SWITCH, ROTARY
S2005	1-572-853-11	SWITCH, ROTARY
S2006	1-570-909-11	SWITCH, TACTIL (REFLOW TYPE)

<CRYSTAL>

X2001	1-579-319-11	OSCILLATOR, CRYSTAL
X2002	1-579-317-11	OSCILLATOR, CRYSTAL
X2003	1-767-584-11	VIBRATOR, CERAMIC

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Rf.NO.	PART NO.	DESCRIPTION			REMARK
	⚠* A-1311-537-A	G BOARD, COMPLETE (US/CND)			
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	⚠* A-1311-587-A	G BOARD, COMPLETE (AEP)			
		******************************			
	⚠* 2-434-297-01	BRACKET (DP-UR17)			
	⚠* 4-032-770-81	HEAT SINK, V-OUT			
	⚠ 4-560-217-01	RUBBER (1047) (B), INSULATING			

<CAPACITOR>

C6100	⚠1-104-665-91	ELECT	100MF	20%	25V
C6122	⚠1-107-675-91	ELECT	1MF	20%	450V
C6151	⚠1-113-511-11	FILM	0.47MF	20%	275V
C6152	⚠1-113-920-91	CERAMIC	0.0022MF	20%	250V
C6153	⚠1-113-920-91	CERAMIC	0.0022MF	20%	250V
C6155	⚠1-113-511-11	FILM	0.47MF	20%	275V
C6156	⚠1-113-920-91	CERAMIC	0.0022MF	20%	250V
C6157	⚠1-113-920-91	CERAMIC	0.0022MF	20%	250V
C6159	⚠1-113-511-11	FILM	0.47MF	20%	275V
C6160	⚠1-117-228-11	FILM	2.2MF	10%	450V
C6161	⚠1-117-228-11	FILM	2.2MF	10%	450V
C6162	⚠1-125-601-11	ELECT	470MF	20%	450V
C6163	⚠1-125-601-11	ELECT	470MF	20%	450V
C6165	⚠1-113-912-71	CERAMIC	0.0047MF	20%	250V
C6170	⚠1-126-971-91	ELECT	470MF	20%	50V
C6171	⚠1-126-971-91	ELECT	470MF	20%	50V
C6179	⚠1-113-920-91	CERAMIC	0.0022MF	20%	250V
C6180	⚠1-113-920-91	CERAMIC	0.0022MF	20%	250V
C6300	⚠1-164-644-91	CERAMIC	330PF	10%	500V
C6301	⚠1-164-644-91	CERAMIC	330PF	10%	500V
C6302	⚠1-126-967-91	ELECT	47MF	20%	50V
C6303	⚠1-126-969-91	ELECT	220MF	20%	50V
C6304	⚠1-137-188-91	FILM	0.15MF	5%	50V
C6305	⚠1-137-188-91	FILM	0.15MF	5%	50V
C6306	⚠1-136-494-91	FILM	0.056MF	5%	50V
C6308	⚠1-136-494-91	FILM	0.056MF	5%	50V
C6309	⚠1-136-066-11	FILM	0.003MF	3%	2KV
C6310	⚠1-126-960-91	ELECT	1MF	20%	50V
C6311	⚠1-137-192-81	FILM	0.33MF	5%	50V
C6312	⚠1-126-967-91	ELECT	47MF	20%	50V
C6313	⚠1-115-741-91	ELECT	0.0022F	20%	10V
C6314	⚠1-136-497-91	FILM	0.1MF	5%	50V
C6315	⚠1-126-963-91	ELECT	4.7MF	20%	50V
C6316	⚠1-115-754-91	ELECT	120MF	20%	16V
C6320	⚠1-136-209-61	FILM	0.1MF	10%	630V
C6321	⚠1-126-959-91	ELECT	0.47MF	20%	50V
C6401	⚠1-123-024-91	ELECT	33MF		160V
C6402	⚠1-115-792-51	ELECT	0.0022F	20%	25V
C6403	⚠1-115-815-51	ELECT	0.0012F	20%	35V
C6404	⚠1-115-815-51	ELECT	0.0012F	20%	35V
C6405	⚠1-107-792-81	CERAMIC	100PF	5%	1KV
C6406	⚠1-115-789-91	ELECT	0.001F	20%	25V
C6408	⚠1-107-757-11	FILM	0.022MF	5%	0
C6413	⚠1-164-644-91	CERAMIC	330PF	10%	500V
C6414	⚠1-109-955-91	ELECT	1MF	20%	160V
C6415	⚠1-115-815-51	ELECT	0.0012F	20%	35V
C6416	⚠1-115-815-51	ELECT	0.0012F	20%	35V
C6417	⚠1-115-792-51	ELECT	0.0022F	20%	25V
C6418	⚠1-115-789-91	ELECT	0.001F	20%	25V

G

Rf.NO.	PART NO.	DESCRIPTION			REMARK
C6419	⚠1-123-024-91	ELECT	33MF		160V
C6421	⚠1-107-792-81	CERAMIC	100PF	5%	1KV
C6424	⚠1-117-227-11	FILM	1MF	10%	450V
C6425	⚠1-126-967-91	ELECT	47MF	20%	50V
C6426	⚠1-136-497-91	FILM	0.1MF	5%	50V
C6427	⚠1-136-497-91	FILM	0.1MF	5%	50V
C6428	⚠1-126-967-91	ELECT	47MF	20%	50V
C6501	⚠1-107-655-91	ELECT	47MF	20%	250V
C6502	⚠1-126-600-51	ELECT	100MF	20%	160V
C6503	⚠1-115-743-51	ELECT	0.0033F	20%	10V
C6504	⚠1-115-762-91	ELECT	820MF	20%	16V
C6505	⚠1-117-227-11	FILM	1MF	10%	450V
C6508	⚠1-107-757-11	FILM	0.022MF	5%	0
C6514	⚠1-109-955-91	ELECT	1MF	20%	160V
C6515	⚠1-107-655-91	ELECT	47MF	20%	250V
C6516	⚠1-115-743-51	ELECT	0.0033F	20%	10V
C6517	⚠1-115-762-91	ELECT	820MF	20%	16V
C6518	⚠1-126-600-51	ELECT	100MF	20%	160V
C6520	⚠1-107-792-81	CERAMIC	100PF	5%	1KV
C6521	⚠1-107-792-81	CERAMIC	100PF	5%	1KV

<CONNECTOR>

Rf.NO.	PART NO.	DESCRIPTION
CN6851	⚠* 1-580-843-11	PIN, CONNECTOR (POWER)
CN6860	⚠* 1-573-896-11	SOCKET, CONNECTOR 12P
CN6861	⚠* 1-569-967-11	SOCKET, CONNECTOR 11P
CN6862	⚠* 1-569-967-11	SOCKET, CONNECTOR 11P
CN6870	⚠* 1-573-896-11	SOCKET, CONNECTOR 12P
CN6871	⚠* 1-573-896-11	SOCKET, CONNECTOR 12P
CN6872	⚠* 1-573-896-11	SOCKET, CONNECTOR 12P

<DIODE>

Rf.NO.	PART NO.	DESCRIPTION
D6100	⚠8-719-921-20	DIODE 1SS119-25TD
D6101	⚠8-719-921-20	DIODE 1SS119-25TD
D6102	⚠8-719-111-82	DIODE RD5.1ES-T1B2
D6103	⚠8-719-111-82	DIODE RD5.1ES-T1B2
D6117	⚠8-719-510-06	DIODE S1WB60
D6151	⚠8-719-033-58	DIODE RBV-1506
	⚠4-382-854-11	SCREW (M3X10), P, SW (+) ; D6151
D6152	⚠8-719-921-20	DIODE 1SS119-25TD
D6154	⚠8-719-044-70	DIODE S16L60
D6156	⚠8-719-510-18	DIODE D1NS4-TA
D6158	⚠8-719-510-18	DIODE D1NS4-TA
D6160	⚠8-719-510-18	DIODE D1NS4-TA
D6301	⚠8-719-921-20	DIODE 1SS119-25TD
D6302	⚠8-719-921-20	DIODE 1SS119-25TD
D6306	⚠8-719-048-60	DIODE F10P03QL
	⚠4-382-854-11	SCREW (M3X10), P, SW (+) ; D6306
D6307	⚠8-719-921-20	DIODE 1SS119-25TD
D6308	⚠8-719-921-20	DIODE 1SS119-25TD
D6309	⚠8-719-510-37	DIODE D5LC20U
D6318	⚠8-719-921-20	DIODE 1SS119-25TD
D6319	⚠8-719-921-20	DIODE 1SS119-25TD
D6320	⚠8-719-921-20	DIODE 1SS119-25TD
D6321	⚠8-719-921-20	DIODE 1SS119-25TD
D6323	⚠8-719-921-20	DIODE 1SS119-25TD
D6406	⚠8-719-510-39	DIODE D10LC20U
	⚠4-382-854-11	SCREW (M3X10), P, SW (+) ; D6406

Rf.NO.	PART NO.	DESCRIPTION	REMARK
D6409	⚠8-719-057-51	DIODE D10LC20UR	
	⚠4-382-854-11	SCREW (M3X10), P, SW (+) ; D6409	
D6410	⚠8-719-112-81	DIODE RD12ES-T1B2	
D6411	⚠8-719-510-09	DIODE D10SC6M	
	⚠4-382-854-11	SCREW (M3X10), P, SW (+) ; D6411	
D6412	⚠8-719-988-31	DIODE D10SC6MR	
	⚠4-382-854-11	SCREW (M3X10), P, SW (+) ; D6412	
D6413	⚠8-719-057-83	DIODE D10LC20U-F	
D6414	⚠8-719-057-51	DIODE D10LC20UR	
D6506	⚠8-719-052-31	DIODE D1NL40-TR2	
D6507	⚠8-719-052-31	DIODE D1NL40-TR2	
D6508	⚠8-719-038-46	DIODE D5SC4MR-F	
	⚠4-382-854-11	SCREW (M3X10), P, SW (+) ; D6508	
D6510	⚠8-719-052-31	DIODE D1NL40-TR2	
D6511	⚠8-719-052-31	DIODE D1NL40-TR2	
D6512	⚠8-719-112-81	DIODE RD12ES-T1B2	
D6513	⚠8-719-510-12	DIODE D10SC4M	
	⚠4-382-854-11	SCREW (M3X10), P, SW (+) ; D6513	
D6515	⚠8-719-057-83	DIODE D10LC20U-F	
	⚠4-382-854-11	SCREW (M3X10), P, SW (+) ; D6515	
D6516	⚠8-719-057-51	DIODE D10LC20UR	
	⚠4-382-854-11	SCREW (M3X10), P, SW (+) ; D6516	

<IC>

Rf.NO.	PART NO.	DESCRIPTION
IC6300	⚠8-759-189-04	IC uPC1093J-T
IC6302	⚠8-729-041-16	TRANSISTOR MX0341AB-F
	⚠4-382-854-11	SCREW (M3X10), P, SW (+) ; IC6302
IC6401	⚠8-759-479-74	IC IT1084CT-12
	⚠4-382-854-11	SCREW (M3X10), P, SW (+) ; IC6401
IC6405	⚠8-749-920-61	IC SE-135N
	⚠4-382-854-11	SCREW (M3X10), P, SW (+) ; IC6405
IC6505	⚠8-749-920-61	IC SE-135N
	⚠4-382-854-11	SCREW (M3X10), P, SW (+) ; IC6505

<COIL>

Rf.NO.	PART NO.	DESCRIPTION
L6151	⚠1-431-207-11	TRANSFORMER, LINE FILTER (AEP)
L6152	⚠1-431-207-11	TRANSFORMER, LINE FILTER (AEP)
L6153	⚠1-403-675-11	COIL, CHOKE 34.0UH
L6154	⚠1-403-675-11	COIL, CHOKE 34.0UH
L6155	⚠1-403-673-11	COIL, CHOKE 480UH
L6300	⚠1-412-525-21	INDUCTOR 10UH
L6310	⚠1-412-537-21	INDUCTOR 100UH
L6311	⚠1-412-519-21	INDUCTOR 3.3UH
L6400	⚠1-406-656-21	COIL, CHOKE 3.3UH
L6401	⚠1-406-656-21	COIL, CHOKE 3.3UH
L6402	⚠1-414-158-21	INDUCTOR 2.2UH
L6403	⚠1-412-519-21	INDUCTOR 3.3UH
L6404	⚠1-412-525-21	INDUCTOR 10UH
L6410	⚠1-406-667-21	COIL, CHOKE 220UH
L6500	⚠1-412-525-21	INDUCTOR 10UH
L6501	⚠1-414-158-21	INDUCTOR 2.2UH
L6502	⚠1-412-525-21	INDUCTOR 10UH
L6503	⚠1-412-525-21	INDUCTOR 10UH
L6510	⚠1-406-667-21	COIL, CHOKE 220UH

<PHOTO COUPLER>

Rf.NO.	PART NO.	DESCRIPTION
PH6101	⚠8-749-010-65	PHOTO COUPLER PC123FY2
PH6300	⚠8-749-010-65	PHOTO COUPLER PC123FY2
PH6400	⚠8-749-010-65	PHOTO COUPLER PC123FY2

Rf.NO.	PART NO.	DESCRIPTION				REMARK
PH6500	⚠8-749-010-65	PHOTO COUPLER PC123FY2				
		<TRANSISTOR>				
Q6100	⚠8-729-231-14	TRANSISTOR 2SA1015TP-GR				
Q6101	⚠8-729-231-14	TRANSISTOR 2SA1015TP-GR				
Q6151	⚠8-729-926-54	TRANSISTOR IRFP460				
	⚠4-382-854-11	SCREW (M3X10), P, SW (+) ; Q6151				
Q6152	⚠8-729-926-54	TRANSISTOR IRFP460				
	⚠4-382-854-11	SCREW (M3X10), P, SW (+) ; Q6152				
Q6153	⚠8-729-188-23	TRANSISTOR 2SD882-P				
Q6154	⚠8-729-177-23	TRANSISTOR 2SB772-P				
	⚠4-382-854-11	SCREW (M3X10), P, SW (+) ; Q6154				
Q6158	⚠8-729-188-23	TRANSISTOR 2SD882-P				
Q6159	⚠8-729-231-14	TRANSISTOR 2SA1015TP-GR				
Q6160	⚠8-729-231-14	TRANSISTOR 2SA1015TP-GR				
Q6161	⚠8-729-177-23	TRANSISTOR 2SB772-P				
Q6302	⚠8-729-205-12	TRANSISTOR 2SC1815GR-TPE2				
Q6303	⚠8-729-231-14	TRANSISTOR 2SA1015TP-GR				
Q6304	⚠8-729-205-12	TRANSISTOR 2SC1815GR-TPE2				
Q6305	⚠8-729-231-14	TRANSISTOR 2SA1015TP-GR				
Q6306	⚠8-729-924-90	TRANSISTOR 2SB1370-EF				
Q6307	⚠8-729-205-12	TRANSISTOR 2SA1815GR-TPE2				
Q6318	⚠8-729-900-90	TRANSISTOR DTC144ES-TP				
Q6400	⚠8-729-023-20	TRANSISTOR 2SK1567				
	⚠4-382-854-11	SCREW (M3X10), P, SW (+) ; Q6400				
Q6401	⚠8-729-023-20	TRANSISTOR 2SK1567				
	⚠4-382-854-11	SCREW (M3X10), P, SW (+) ; Q6401				
Q6406	⚠8-729-423-48	TRANSISTOR 2SA1309A-QRSTA				
Q6407	⚠8-729-168-82	TRANSISTOR 2SC2688-L				
Q6500	⚠8-729-023-20	TRANSISTOR 2SK1567				
	⚠4-382-854-11	SCREW (M3X10), P, SW (+) ; Q6500				
Q6501	⚠8-729-023-20	TRANSISTOR 2SK1567				
	⚠4-382-854-11	SCREW (M3X10), P, SW (+) ; Q6501				
		<RESISTOR>				
R6100	⚠1-247-831-91	CARBON	1K	5%	1/4W	
R6101	⚠1-247-863-91	CARBON	22K	5%	1/4W	
R6102	⚠1-247-843-91	CARBON	3.3K	5%	1/4W	
R6103	⚠1-247-843-91	CARBON	3.3K	5%	1/4W	
R6104	⚠1-247-855-91	CARBON	10K	5%	1/4W	
R6105	⚠1-247-855-91	CARBON	10K	5%	1/4W	
R6150	⚠1-205-997-11	WIREWOUND	2.2	5%	10W	
R6151	⚠1-215-389-91	METAL	47	1%	1/4W	
R6152	⚠1-205-997-11	WIREWOUND	2.2	5%	10W	
R6154	⚠1-216-381-71	METAL OXIDE	0.22	5%	3W	F
R6155	⚠1-216-381-71	METAL OXIDE	0.22	5%	3W	F
R6156	⚠1-216-381-71	METAL OXIDE	0.22	5%	3W	F
R6159	⚠1-247-839-91	CARBON	2.2K	5%	1/4W	
R6160	⚠1-247-799-91	CARBON	47	5%	1/4W	
R6161	⚠1-247-767-91	CARBON	2.2	5%	1/4W	
R6162	⚠1-247-839-91	CARBON	2.2K	5%	1/4W	
R6163	⚠1-247-799-91	CARBON	47	5%	1/4W	
R6164	⚠1-247-767-91	CARBON	2.2	5%	1/4W	
R6171	⚠1-215-389-91	METAL	47	1%	1/4W	
R6180	⚠1-216-491-71	METAL OXIDE	56K	5%	3W	F
R6181	⚠1-216-491-71	METAL OXIDE	56K	5%	3W	F
R6182	⚠1-215-860-71	METAL OXIDE	33	5%	1W	F
R6183	⚠1-215-927-71	METAL OXIDE	47K	5%	3W	F
R6184	⚠1-215-927-71	METAL OXIDE	47K	5%	3W	F
R6185	⚠1-247-871-91	CARBON	47K	5%	1/4W	
R6186	⚠1-247-839-91	CARBON	2.2K	5%	1/4W	
R6187	⚠1-247-839-91	CARBON	2.2K	5%	1/4W	
R6188	⚠1-247-855-91	CARBON	10K	5%	1/4W	
R6191	⚠1-216-381-71	METAL OXIDE	0.22	5%	3W	F
R6194	⚠1-202-882-91	SOLID	560K	20%	1/2W	
R6198	⚠1-247-855-91	CARBON	10K	5%	1/4W	
R6199	⚠1-247-855-91	CARBON	10K	5%	1/4W	
R6300	⚠1-260-288-71	CARBON	0.47	5%	1/2W	F
R6301	⚠1-260-288-71	CARBON	0.47	5%	1/2W	F
R6302	⚠1-247-887-91	CARBON	220K	5%	1/4W	
R6303	⚠1-247-887-91	CARBON	220K	5%	1/4W	
R6304	⚠1-247-887-91	CARBON	220K	5%	1/4W	
R6305	⚠1-247-887-91	CARBON	220K	5%	1/4W	
R6306	⚠1-259-033-91	CARBON	1	5%	1/4W	
R6307	⚠1-259-033-91	CARBON	1	5%	1/4W	
R6309	⚠1-247-831-91	CARBON	1K	5%	1/4W	
R6310	⚠1-247-871-91	CARBON	47K	5%	1/4W	
R6311	⚠1-247-871-91	CARBON	47K	5%	1/4W	
R6312	⚠1-247-843-91	CARBON	3.3K	5%	1/4W	
R6313	⚠1-247-855-91	CARBON	10K	5%	1/4W	
R6314	⚠1-215-428-91	METAL	2K	1%	1/4W	
R6315	⚠1-247-855-91	CARBON	10K	5%	1/4W	
R6316	⚠1-215-429-91	METAL	2.2K	1%	1/4W	
R6317	⚠1-247-807-91	CARBON	100	5%	1/4W	
R6318	⚠1-247-823-91	CARBON	470	5%	1/4W	
R6319	⚠1-215-907-71	METAL OXIDE	22	5%	3W	F
R6321	⚠1-247-839-91	CARBON	2.2K	5%	1/4W	
R6322	⚠1-247-839-91	CARBON	2.2K	5%	1/4W	
R6323	⚠1-247-831-91	CARBON	1K	5%	1/4W	
R6324	⚠1-247-819-91	CARBON	330	5%	1/4W	
R6325	⚠1-247-863-91	CARBON	22K	5%	1/4W	
R6326	⚠1-247-819-91	CARBON	330	5%	1/4W	
R6350	⚠1-247-847-91	CARBON	4.7K	5%	1/4W	
R6351	⚠1-247-847-91	CARBON	4.7K	5%	1/4W	
R6352	⚠1-247-847-91	CARBON	4.7K	5%	1/4W	
R6353	⚠1-247-847-91	CARBON	4.7K	5%	1/4W	
R6355	⚠1-247-847-91	CARBON	4.7K	5%	1/4W	
R6356	⚠1-247-863-91	CARBON	22K	5%	1/4W	
R6401	⚠1-247-879-91	CARBON	100K	5%	1/4W	
R6403	⚠1-202-933-61	FUSIBLE	0.1	10%	1/2W	F
R6404	⚠1-216-341-71	METAL OXIDE	0.22	5%	1W	F
R6405	⚠1-216-341-71	METAL OXIDE	0.22	5%	1W	F
R6408	⚠1-247-847-91	CARBON	4.7K	5%	1/4W	
R6409	⚠1-247-847-91	CARBON	4.7K	5%	1/4W	
R6421	⚠1-215-875-71	METAL OXIDE	10K	5%	1W	F
R6422	⚠1-247-863-91	CARBON	22K	5%	1/4W	
R6423	⚠1-247-807-91	CARBON	100	5%	1/4W	
R6424	⚠1-249-377-91	CARBON	0.47	5%	1/4W	F
R6425	⚠1-215-469-91	METAL	100K	1%	1/4W	
R6426	⚠1-247-831-91	CARBON	1K	5%	1/4W	
R6427	⚠1-247-839-91	CARBON	2.2K	5%	1/4W	
R6431	⚠1-260-304-71	CARBON	10	5%	1/2W	F
R6432	⚠1-215-445-91	METAL	10K	1%	1/4W	
R6433	⚠1-247-879-91	CARBON	100K	5%	1/4W	
R6450	⚠1-247-767-91	CARBON	2.2	5%	1/4W	
R6501	⚠1-247-879-91	CARBON	100K	5%	1/4W	
R6503	⚠1-202-933-61	FUSIBLE	0.1	10%	1/2W	F
R6504	⚠1-216-341-71	METAL OXIDE	0.22	5%	1W	F

G GA GB

Rf.NO.	PART NO.	DESCRIPTION				REMARK
R6505	⚠1-216-341-71	METAL OXIDE	0.22	5%	1W	F
R6508	⚠1-247-847-91	CARBON	4.7K	5%	1/4W	
R6509	⚠1-247-847-91	CARBON	4.7K	5%	1/4W	
R6510	⚠1-247-855-91	CARBON	10K	5%	1/4W	
R6521	⚠1-215-875-71	METAL OXIDE	10K	5%	1W	F
R6522	⚠1-247-863-91	CARBON	22K	5%	1/4W	
R6523	⚠1-247-807-91	CARBON	100	5%	1/4W	
R6524	⚠1-249-377-91	CARBON	0.47	5%	1/4W	F
R6525	⚠1-215-469-91	METAL	100K	1%	1/4W	
R6526	⚠1-215-444-91	METAL	9.1K	1%	1/4W	
R6527	⚠1-247-839-91	CARBON	2.2K	5%	1/4W	
R6528	⚠1-247-877-91	CARBON	82K	5%	1/4W	
R6529	⚠1-215-927-71	METAL OXIDE	47K	5%	3W	F
R6530	⚠1-215-900-71	METAL OXIDE	22K	5%	2W	F
R6531	⚠1-260-304-71	CARBON	10	5%	1/2W	
R6532	⚠1-247-851-91	CARBON	6.8K	5%	1/4W	
R6550	⚠1-247-767-91	CARBON	2.2	5%	1/4W	
	<RELAY>					
RY6151	⚠* 1-515-868-11	RELAY (US/CND)				
RY6151	⚠* 1-515-489-11	RELAY (AEP)				
	<TRANSFORMER>					
T6300	⚠1-429-987-11	TRANSFORMER, CONVERTER (PIT)				
T6301	⚠1-429-992-11	TRANSFORMER, CONVERTER (PRT)				
T6401	⚠1-431-422-11	TRANSFORMER, CONVERTER				
T6501	⚠1-431-423-11	TRANSFORMER, CONVERTER				
	<VARISTOR>					
VDR640	⚠1-809-267-51	VARISTOR ERZV10D471				
VDR650	⚠1-809-267-51	VARISTOR ERZV10D471				
	<VARISTOR>					
VZ6151	⚠1-809-581-11	VARISTOR				
**						
	* A-1311-538-A	GA BOARD, COMPLETE (US/CND)				
		*******************************				
	* A-1311-568-A	GA BOARD, COMPLETE (AEP)				
		*******************************				
	<CONNECTOR>					
CN6001	* 1-695-292-11	PIN, CONNECTOR (POWER)				
CN6002	* 1-580-844-11	PIN, CONNECTOR (POWER)				
	<FUSE>					
F6001	⚠1-576-193-11	FUSE 6.3A/125V (US/CND)				
F6001	⚠1-576-232-21	FUSE (H.B.C.) 5A/250V (AEP)				
	1-533-223-11	CLIP, FUSE ; F6001				
**						

Rf.NO.	PART NO.	DESCRIPTION				REMARK
	* A-1311-539-A	GB BOARD, COMPLETE				
		*******************************				
	<CAPACITOR>					
C6070	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V	
C6071	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V	
C6079	1-163-003-11	CERAMIC CHIP	330PF	10%	50V	
C6166	1-136-165-00	FILM	0.1MF	5%	50V	
C6167	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	
C6168	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V	
C6169	1-136-165-00	FILM	0.1MF	5%	50V	
C6172	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	
C6173	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C6174	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C6181	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C6182	1-126-960-11	ELECT	1MF	20%	50V	
C6183	1-104-665-11	ELECT	100MF	20%	25V	
	<DIODE>					
D6159	8-719-110-31	DIODE RD12ESB2				
D6161	8-719-107-87	THYRISTOR 03P2M				
D6162	8-719-106-23	DIODE RD7.5M-B2				
D6163	8-719-510-02	DIODE D1NS4				
D6172	8-719-510-02	DIODE D1NS4				
D6173	8-719-801-78	DIODE 1SS184				
D6174	8-719-109-97	DIODE RD6.8ESB2				
	<IC>					
IC6151	8-759-458-28	IC UC2854N				
	<TRANSISTOR>					
Q6155	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L				
Q6156	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q6157	8-729-216-22	TRANSISTOR 2SA1162-G				
	<RESISTOR>					
R6065	1-215-475-00	METAL	180K	1%	1/4W	
R6066	1-215-475-00	METAL	180K	1%	1/4W	
R6067	1-216-676-11	METAL CHIP	11K	0.50%	1/10W	
R6068	1-216-097-91	METAL GLAZE	100K	5%	1/10W	
R6070	1-216-668-11	METAL CHIP	5.1K	0.50%	1/10W	
R6071	1-247-863-91	CARBON	22K	5%	1/4W	
R6110	1-215-475-00	METAL	180K	1%	1/4W	
R6111	1-215-475-00	METAL	180K	1%	1/4W	
R6112	1-216-675-11	METAL CHIP	10K	0.50%	1/10W	
R6113	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W	
R6114	1-247-897-11	CARBON	560K	5%	1/4W	
R6115	1-247-897-11	CARBON	560K	5%	1/4W	
R6116	1-215-475-00	METAL	180K	1%	1/4W	
R6117	1-215-475-00	METAL	180K	1%	1/4W	
R6149	1-216-647-11	METAL CHIP	680	0.50%	1/10W	
R6172	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R6173	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R6174	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	

Rf.NO.	PART NO.	DESCRIPTION			REMARK
R6175	1-216-105-91	METAL GLAZE	220K	5%	1/10W
R6176	1-247-895-91	CARBON	470K	5%	1/4W
R6177	1-247-895-91	CARBON	470K	5%	1/4W
R6178	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R6179	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R6180	1-216-679-11	METAL CHIP	15K	0.50%	1/10W
R6181	1-216-101-00	METAL GLAZE	150K	5%	1/10W
R6183	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R6184	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R6185	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W
R6189	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R6190	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6192	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R6193	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R6195	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R6196	1-247-863-91	CARBON	22K	5%	1/4W
R6203	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
	* A-1311-564-A	GM BOARD, COMPLETE			
	<CAPACITOR>				
C310	1-126-934-11	ELECT	220MF	20%	16V
C311	1-126-934-11	ELECT	220MF	20%	16V
C312	1-126-934-11	ELECT	220MF	20%	16V
C313	1-126-934-11	ELECT	220MF	20%	16V
C314	1-126-933-11	ELECT	100MF	20%	16V
	<CONNECTOR>				
CN302	* 1-564-511-61	PLUG, CONNECTOR 8P			
CN303	* 1-564-506-11	PLUG, CONNECTOR 3P			
CN304	* 1-564-506-11	PLUG, CONNECTOR 3P			
CN305	* 1-564-506-11	PLUG, CONNECTOR 3P			
CN306	* 1-564-506-11	PLUG, CONNECTOR 3P			
CN307	* 1-564-508-11	PLUG, CONNECTOR 5P			
CN308	* 1-564-510-11	PLUG, CONNECTOR 7P			
CN309	* 1-564-506-11	PLUG, CONNECTOR 3P			
CN310	* 1-564-506-11	PLUG, CONNECTOR 3P			
CN311	* 1-564-506-11	PLUG, CONNECTOR 3P			
CN312	* 1-564-512-11	PLUG, CONNECTOR 9P			
CN313	* 1-564-515-11	PLUG, CONNECTOR 12P			
CN314	* 1-564-506-11	PLUG, CONNECTOR 3P			
CN315	* 1-564-510-11	PLUG, CONNECTOR 7P			
CN317	* 1-508-784-00	PIN, CONNECTOR (5mm PITCH) 1P			
	* A-1316-300-A	GC BOARD, COMPLETE			
	<CAPACITOR>				
C6400	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C6401	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C6402	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C6403	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C6404	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C6406	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C6407	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C6409	1-102-820-00	CERAMIC	330PF	5%	50V

Rf.NO.	PART NO.	DESCRIPTION			REMARK	
C6410	1-164-222-11	CERAMIC CHIP	0.22MF		25V	
C6411	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C6412	1-136-171-00	FILM	0.33MF	5%	50V	
C6422	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C6423	1-163-005-11	CERAMIC CHIP	470PF	10%	50V	
	<CONNECTOR>					
CN6856	* 1-569-968-11	PLUG (WITH CONNECTOR) (L) 11P				
	<DIODE>					
D6400	8-719-986-73	DIODE RB441Q				
D6401	8-719-986-73	DIODE RB441Q				
D6402	8-719-801-78	DIODE 1SS184				
D6403	8-719-801-78	DIODE 1SS184				
D6404	8-719-801-78	DIODE 1SS184				
D6405	8-719-106-44	DIODE RD9.1M-B2				
	<IC>					
IC6400	8-759-298-87	IC CXA8038P				
	<TRANSISTOR>					
Q6402	8-729-216-22	TRANSISTOR 2SA1162-G				
Q6403	8-729-216-22	TRANSISTOR 2SA1162-G				
Q6404	8-729-027-43	TRANSISTOR DTC114EKA-T146				
Q6405	8-729-140-96	TRANSISTOR 2SD774-34				
	<RESISTOR>					
R6400	1-216-009-00	METAL GLAZE	22	5%	1/10W	
R6401	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R6406	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R6407	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R6410	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R6411	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R6412	1-216-097-91	METAL GLAZE	100K	5%	1/10W	
R6413	1-249-389-11	CARBON	4.7	5%	1/4W	F
R6414	1-249-389-11	CARBON	4.7	5%	1/4W	F
R6415	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R6416	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R6417	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R6418	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R6419	1-216-295-91	CONDUCTOR, CHIP				
R6420	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R6428	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R6429	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R6430	1-249-429-11	CARBON	10K	5%	1/4W	
	<VARIABLE RESISTOR>					
RV6401	1-241-785-11	RES, ADJ, CERMET 10K				
	<TRANSFORMER>					
T6400	1-429-741-11	TRANSFORMER, DRIVE				

GD

Rf.NO.	PART NO.	DESCRIPTION			REMARK
	* A-1316-301-A	GD BOARD, COMPLETE			
		******************************			
		<CAPACITOR>			
C6003	1-126-964-11	ELECT	10MF	20%	50V
C6601	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C6602	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C6603	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C6604	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C6605	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C6606	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C6607	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C6801	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C6802	1-126-960-11	ELECT	1MF	20%	50V
		<DIODE>			
D6601	8-719-986-73	DIODE RB441Q			
D6602	8-719-986-73	DIODE RB441Q			
D6603	8-719-986-73	DIODE RB441Q			
D6604	8-719-986-73	DIODE RB441Q			
		<IC>			
IC6601	8-759-133-90	IC uPC339C			
IC6602	8-759-133-90	IC uPC339C			
IC6603	8-759-133-90	IC uPC339C			
IC6604	8-759-133-90	IC uPC339C			
IC6605	8-759-133-90	IC uPC339C			
IC6606	8-759-925-76	IC SN74HC08ANS			
IC6607	8-759-925-79	IC SN74HC11ANS			
IC6608	8-759-908-15	IC TL431CLP			
IC6609	8-759-239-58	IC TC74HC221AF			
		<RESISTOR>			
R6001	1-247-807-31	CARBON	100	5%	1/4W
R6601	1-215-453-00	METAL	22K	1%	1/4W
R6602	1-215-431-00	METAL	2.7K	1%	1/4W
R6603	1-215-457-00	METAL	33K	1%	1/4W
R6604	1-215-431-00	METAL	2.7K	1%	1/4W
R6605	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6606	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6607	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R6608	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6609	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6610	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R6611	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R6621	1-215-431-00	METAL	2.7K	1%	1/4W
R6622	1-215-458-00	METAL	36K	1%	1/4W
R6623	1-215-431-00	METAL	2.7K	1%	1/4W
R6624	1-215-454-00	METAL	24K	1%	1/4W
R6625	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6626	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6627	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R6628	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6629	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6630	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R6631	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R6641	1-215-448-00	METAL	13K	1%	1/4W
R6642	1-215-431-00	METAL	2.7K	1%	1/4W
R6643	1-215-452-00	METAL	20K	1%	1/4W
R6644	1-215-431-00	METAL	2.7K	1%	1/4W
R6645	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6646	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6647	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R6648	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6649	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6650	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R6651	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R6661	1-215-431-00	METAL	2.7K	1%	1/4W
R6662	1-215-453-00	METAL	22K	1%	1/4W
R6663	1-215-431-00	METAL	2.7K	1%	1/4W
R6664	1-215-450-00	METAL	16K	1%	1/4W
R6665	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6666	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6667	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R6668	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6669	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6670	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R6671	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R6701	1-215-431-00	METAL	2.7K	1%	1/4W
R6702	1-215-431-00	METAL	2.7K	1%	1/4W
R6703	1-215-442-00	METAL	7.5K	1%	1/4W
R6704	1-215-431-00	METAL	2.7K	1%	1/4W
R6705	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6706	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6707	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R6708	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6709	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6710	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R6711	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R6721	1-215-431-00	METAL	2.7K	1%	1/4W
R6722	1-215-445-00	METAL	10K	1%	1/4W
R6723	1-215-431-00	METAL	2.7K	1%	1/4W
R6724	1-215-439-00	METAL	5.6K	1%	1/4W
R6725	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6726	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6727	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R6728	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6729	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6730	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R6731	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R6741	1-215-464-00	METAL	62K	1%	1/4W
R6742	1-215-431-00	METAL	2.7K	1%	1/4W
R6743	1-215-466-00	METAL	75K	1%	1/4W
R6744	1-215-431-00	METAL	2.7K	1%	1/4W
R6745	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6746	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6747	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R6748	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6749	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6750	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R6751	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R6752	1-215-464-00	METAL	62K	1%	1/4W
R6754	1-215-466-00	METAL	75K	1%	1/4W
R6761	1-215-431-00	METAL	2.7K	1%	1/4W
R6762	1-215-466-00	METAL	75K	1%	1/4W
R6763	1-215-431-00	METAL	2.7K	1%	1/4W

Rf.NO.	PART NO.	DESCRIPTION			REMARK
R6764	1-215-465-00	METAL	68K	1%	1/4W
R6765	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6766	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6767	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R6768	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6769	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6770	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R6771	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R6773	1-215-466-00	METAL	75K	1%	1/4W
R6775	1-215-465-00	METAL	68K	1%	1/4W
R6801	1-215-469-00	METAL	100K	1%	1/4W
R6802	1-215-431-00	METAL	2.7K	1%	1/4W
R6803	1-215-472-00	METAL	130K	1%	1/4W
R6804	1-215-431-00	METAL	2.7K	1%	1/4W
R6805	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6806	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6807	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R6808	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6809	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6810	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R6811	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R6812	1-215-469-00	METAL	100K	1%	1/4W
R6814	1-215-472-00	METAL	130K	1%	1/4W
R6821	1-215-397-00	METAL	100	1%	1/4W
R6823	1-216-109-00	METAL GLAZE	330K	5%	1/10W
R6825	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6826	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6827	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R6828	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6829	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R6830	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R6831	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W

<VARIABLE RESISTOR>

Rf.NO.	PART NO.	DESCRIPTION			REMARK
RV6823	1-241-784-11	RES, ADJ, CERMET		4.7K	

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* A-1331-616-A C2R BOARD, COMPLETE

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<CAPACITOR>

Rf.NO.	PART NO.	DESCRIPTION			REMARK
C7701	1-162-115-00	CERAMIC	330PF	10%	2KV
C7704	1-162-115-00	CERAMIC	330PF	10%	2KV

<CONNECTOR>

Rf.NO.	PART NO.	DESCRIPTION
CN7701	* 1-508-784-00	PIN, CONNECTOR (5mm PITCH) 1P
CN7702	* 1-564-507-11	PLUG, CONNECTOR 4P
CN7703	* 1-564-506-11	PLUG, CONNECTOR 3P
CN7704	1-695-915-11	TAB (CONTACT)
CN7705	1-695-915-11	TAB (CONTACT)
CN7706	* 1-564-506-11	PLUG, CONNECTOR 3P

<SOCKET>

Rf.NO.	PART NO.	DESCRIPTION
CR7701	⚠1-251-179-11	SOCKET, PICTURE TUBE

<FERRITE BEAD>

Rf.NO.	PART NO.	DESCRIPTION
FB7701	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB7702	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB7703	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH

<COIL>

Rf.NO.	PART NO.	DESCRIPTION
L7701	1-410-750-41	INDUCTOR 0.47UH

<NEON LAMP>

Rf.NO.	PART NO.	DESCRIPTION
NL7703	1-519-276-21	LAMP, NEON
NL7704	1-519-276-21	LAMP, NEON
NL7705	1-519-276-21	LAMP, NEON

<RESISTOR>

Rf.NO.	PART NO.	DESCRIPTION			REMARK
R7701	1-202-847-00	SOLID	560K	20%	1/2W
R7702	1-202-814-11	SOLID	33K	20%	1/2W
R7703	1-202-533-11	SOLID	22	20%	1/2W
R7704	1-202-818-00	SOLID	1K	20%	1/2W
R7705	1-202-723-00	SOLID	2.2M	20%	1/2W
R7706	1-202-818-00	SOLID	1K	20%	1/2W

<SPARK GAP>

Rf.NO.	PART NO.	DESCRIPTION
SG7701	1-519-422-11	GAP, SPARK
SG7702	1-519-422-11	GAP, SPARK

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* A-1331-617-A C2G BOARD, COMPLETE

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<CAPACITOR>

Rf.NO.	PART NO.	DESCRIPTION			REMARK
C7801	1-162-115-00	CERAMIC	330PF	10%	2KV
C7804	1-162-115-00	CERAMIC	330PF	10%	2KV

<CONNECTOR>

Rf.NO.	PART NO.	DESCRIPTION
CN7801	* 1-508-784-00	PIN, CONNECTOR (5mm PITCH) 1P
CN7802	* 1-564-507-11	PLUG, CONNECTOR 4P
CN7803	* 1-564-506-11	PLUG, CONNECTOR 3P
CN7804	1-695-915-11	TAB (CONTACT)
CN7805	1-695-915-11	TAB (CONTACT)
CN7806	* 1-564-506-11	PLUG, CONNECTOR 3P

<SOCKET>

Rf.NO.	PART NO.	DESCRIPTION
CR7801	⚠1-251-179-11	SOCKET, PICTURE TUBE

<FERRITE BEAD>

Rf.NO.	PART NO.	DESCRIPTION
FB7801	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB7802	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB7803	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH

Rf.NO.	PART NO.	DESCRIPTION				REMARK
		<COIL>				
L7801	1-410-750-41	INDUCTOR 0.47UH				
		<NEON LAMP>				
NL7803	1-519-276-21	LAMP, NEON				
NL7804	1-519-276-21	LAMP, NEON				
NL7805	1-519-276-21	LAMP, NEON				
		<RESISTOR>				
R7801	1-202-847-00	SOLID	560K	20%	1/2W	
R7802	1-202-814-11	SOLID	33K	20%	1/2W	
R7803	1-202-533-11	SOLID	22	20%	1/2W	
R7804	1-202-818-00	SOLID	1K	20%	1/2W	
R7805	1-202-723-00	SOLID	2.2M	20%	1/2W	
R7806	1-202-818-00	SOLID	1K	20%	1/2W	
		<SPARK GAP>				
SG7801	1-519-422-11	GAP, SPARK				
SG7802	1-519-422-11	GAP, SPARK				

* A-1331-618-A C2B BOARD, COMPLETE

Rf.NO.	PART NO.	DESCRIPTION				REMARK
		<CAPACITOR>				
C7901	1-162-115-00	CERAMIC	330PF	10%	2KV	
C7904	1-162-115-00	CERAMIC	330PF	10%	2KV	
		<CONNECTOR>				
CN7901	*1-508-784-00	PIN, CONNECTOR (5mm PITCH) 1P				
CN7902	*1-564-507-11	PLUG, CONNECTOR 4P				
CN7903	*1-564-506-11	PLUG, CONNECTOR 3P				
CN7904	1-695-915-11	TAB (CONTACT)				
CN7905	1-695-915-11	TAB (CONTACT)				
CN7906	*1-564-506-11	PLUG, CONNECTOR 3P				
		<SOCKET>				
CR7901	⚠1-251-179-11	SOCKET, PICTURE TUBE				
		<FERRITE BEAD>				
FB7901	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH				
FB7902	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH				
FB7903	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH				
		<COIL>				
L7901	1-410-750-41	INDUCTOR 0.47UH				
		<NEON LAMP>				
NL7903	1-519-276-21	LAMP, NEON				
NL7904	1-519-276-21	LAMP, NEON				
NL7905	1-519-276-21	LAMP, NEON				
		<RESISTOR>				
R7901	1-202-847-00	SOLID	560K	20%	1/2W	
R7902	1-202-814-11	SOLID	33K	20%	1/2W	
R7903	1-202-533-11	SOLID	22	20%	1/2W	
R7904	1-202-818-00	SOLID	1K	20%	1/2W	
R7905	1-202-723-00	SOLID	2.2M	20%	1/2W	
R7906	1-202-818-00	SOLID	1K	20%	1/2W	
		<SPARK GAP>				
SG7901	1-519-422-11	GAP, SPARK				
SG7902	1-519-422-11	GAP, SPARK				

* A-1331-656-A C1 BOARD, COMPLETE

Rf.NO.	PART NO.	DESCRIPTION				REMARK
		<CAPACITOR>				
C7101	1-126-791-11	ELECT	10MF	20%	16V	
C7102	1-165-319-11	CERAMIC CHIP	0.1MF		50V	
C7104	1-163-127-00	CERAMIC CHIP	270PF	5%	50V	
C7105	1-102-050-00	CERAMIC	0.01MF		500V	
C7106	1-107-651-11	ELECT	4.7MF	20%	250V	
C7107	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C7108	1-136-165-00	FILM	0.1MF	5%	50V	
C7109	1-165-319-11	CERAMIC CHIP	0.1MF		50V	
C7110	1-136-165-00	FILM	0.1MF	5%	50V	
C7111	1-165-319-11	CERAMIC CHIP	0.1MF		50V	
C7112	1-165-319-11	CERAMIC CHIP	0.1MF		50V	
C7113	1-107-651-11	ELECT	4.7MF	20%	250V	
C7114	1-126-791-11	ELECT	10MF	20%	16V	
C7115	1-126-791-11	ELECT	10MF	20%	16V	
C7116	1-165-319-11	CERAMIC CHIP	0.1MF		50V	
C7117	1-165-319-11	CERAMIC CHIP	0.1MF		50V	
C7118	1-165-319-11	CERAMIC CHIP	0.1MF		50V	
C7119	1-165-319-11	CERAMIC CHIP	0.1MF		50V	
C7120	1-126-096-11	ELECT	10MF	20%	25V	
C7121	1-126-096-11	ELECT	10MF	20%	25V	
C7122	1-126-791-11	ELECT	10MF	20%	16V	
C7123	1-136-165-00	FILM	0.1MF	5%	50V	
C7124	1-101-004-00	CERAMIC	0.01MF		50V	
C7125	1-165-319-11	CERAMIC CHIP	0.1MF		50V	
C7126	1-165-319-11	CERAMIC CHIP	0.1MF		50V	
C7127	1-102-050-00	CERAMIC	0.01MF		500V	
C7128	1-126-960-11	ELECT	1MF	20%	50V	
C7129	1-107-616-11	CERAMIC	150PF	5%	500V	
C7130	1-102-116-00	CERAMIC	680PF	10%	50V	
		<CONNECTOR>				
CN7101	*1-564-507-11	PLUG, CONNECTOR 4P				
CN7102	*1-564-506-11	PLUG, CONNECTOR 3P				
CN7103	*1-564-506-11	PLUG, CONNECTOR 3P				
CN7104	*1-564-506-11	PLUG, CONNECTOR 3P				
CN7105	*1-564-507-11	PLUG, CONNECTOR 4P				
CN7106	1-564-510-11	PLUG, CONNECTOR 7P				

Rf.NO.	PART NO.	DESCRIPTION				REMARK
CN7107	1-564-510-11	PLUG, CONNECTOR 7P				
		<DIODE>				
D7101	8-719-901-83	DIODE 1SS83				
D7102	8-719-901-83	DIODE 1SS83				
D7103	8-719-911-19	DIODE 1SS119-25				
D7104	8-719-800-76	DIODE 1SS226				
D7105	8-719-911-19	DIODE 1SS119-25				
D7106	8-719-911-19	DIODE 1SS119-25				
D7107	8-719-911-19	DIODE 1SS119-25				
D7108	8-719-911-19	DIODE 1SS119-25				
D7109	8-719-111-35	DIODE RD3.0ES-T1B				
D7110	8-719-911-19	DIODE 1SS119-25				
D7111	8-719-110-36	DIODE RD13ESB2				
D7112	8-719-901-83	DIODE 1SS83				
D7113	8-719-109-84	DIODE RD5.1ESB1				
D7114	8-719-109-84	DIODE RD5.1ESB1				
D7115	8-719-901-83	DIODE 1SS83				
		<FERRITE BEAD>				
FB7101	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH				
		<FILTER>				
FL7101	1-233-512-21	FILTER, EMI				
FL7102	1-233-512-21	FILTER, EMI				
FL7103	1-233-512-21	FILTER, EMI				
FL7104	1-233-512-21	FILTER, EMI				
FL7105	1-233-512-21	FILTER, EMI				
FL7106	1-233-512-21	FILTER, EMI				
		<IC>				
IC7101	8-749-013-71	IC VPJ03				
IC7102	8-759-710-78	IC NJM082BM-T1				
IC7103	8-759-231-58	IC TA7812S				
IC7104	8-759-929-65	IC LM7912CT				
IC7107	8-759-710-78	IC NJM082BM-T1				
		<COIL>				
L7101	1-410-750-41	INDUCTOR 0.47UH				
		<TRANSISTOR>				
Q7101	8-729-801-88	TRANSISTOR 2SA1381-E				
Q7102	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q7103	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q7104	8-729-801-88	TRANSISTOR 2SA1381-E				
Q7105	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q7106	8-729-801-88	TRANSISTOR 2SA1381-E				
Q7107	8-729-140-50	TRANSISTOR 2SC3209LK				
Q7108	8-729-105-74	TRANSISTOR 2SK523-M1				
		<RESISTOR>				
R7101	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R7103	1-216-298-00	METAL GLAZE	2.2	5%	1/10W	
R7104	1-249-413-11	CARBON	470	5%	1/4W	F
R7105	1-249-408-11	CARBON	180	5%	1/4W	F
R7107	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R7108	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R7109	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R7110	1-202-549-00	SOLID	100	20%	1/2W	
R7111	1-249-414-11	CARBON	560	5%	1/4W	F
R7112	1-216-295-91	CONDUCTOR, CHIP				
R7115	1-202-549-00	SOLID	100	20%	1/2W	
R7116	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	
R7117	1-215-431-00	METAL	2.7K	1%	1/4W	
R7118	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R7119	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R7120	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R7121	1-215-441-00	METAL	6.8K	1%	1/4W	
R7122	1-215-481-00	METAL	330K	1%	1/4W	
R7123	1-215-433-00	METAL	3.3K	1%	1/4W	
R7124	1-249-431-11	CARBON	15K	5%	1/4W	
R7125	1-249-431-11	CARBON	15K	5%	1/4W	
R7126	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R7127	1-249-415-11	CARBON	680	5%	1/4W	
R7128	1-247-807-31	CARBON	100	5%	1/4W	
R7129	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R7130	1-215-457-00	METAL	33K	1%	1/4W	
R7131	1-249-429-11	CARBON	10K	5%	1/4W	
R7132	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R7133	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R7134	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R7135	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R7136	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R7137	1-216-121-91	METAL GLAZE	1M	5%	1/10W	
R7140	1-215-435-00	METAL	3.9K	1%	1/4W	
R7141	1-215-445-00	METAL	10K	1%	1/4W	

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⚠* A-1343-233-A E BOARD, COMPLETE

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⚠* 4-032-770-81 HEAT SINK, V-OUT

Rf.NO.	PART NO.	DESCRIPTION				REMARK
		<CAPACITOR>				
C4001	⚠1-124-347-51	ELECT	100MF	20%	160V	
C4002	⚠1-124-347-51	ELECT	100MF	20%	160V	
C4003	⚠1-163-117-91	CERAMIC CHIP	100PF	5%	50V	
C4004	⚠1-126-959-91	ELECT	0.47MF	20%	50V	
C4005	⚠1-108-377-91	MYLAR	0.01MF	10%	100V	
C4006	⚠1-108-419-91	MYLAR	0.0068MF		200V	
C4007	⚠1-108-375-91	MYLAR	0.0068MF	10%	100V	
C4008	⚠1-102-030-91	CERAMIC	330PF	10%	500V	
C4009	⚠1-126-964-91	ELECT	10MF	20%	50V	
C4010	⚠1-107-652-91	ELECT	10MF	20%	250V	
C4011	⚠1-137-536-91	FILM	0.0022MF	5%	630V	
⧓ C4012	⚠	FILM			1.4KV	
C4013	⚠1-162-318-91	CERAMIC	0.001MF	10%	500V	
C4014	⚠1-126-767-91	ELECT	1000MF	20%	16V	
C4015	⚠1-104-665-91	ELECT	100MF	20%	25V	
C4017	⚠1-163-133-91	CERAMIC CHIP	470PF	5%	50V	
C4018	⚠1-136-103-91	FILM	0.1MF	5%	200V	
C4019	⚠1-130-026-91	FILM	0.0047MF	5%	50V	
C4020	⚠1-136-497-81	FILM	0.1MF	5%	50V	

E

Rf.NO.	PART NO.	DESCRIPTION			REMARK
C4021	⚠1-104-660-91	ELECT	47MF	20%	16V
C4023	⚠1-104-660-91	ELECT	47MF	20%	16V
C4024	⚠1-130-016-91	FILM	680PF	5%	50V
C4025	⚠1-126-960-91	ELECT	1MF	20%	50V
C4026	⚠1-126-960-91	ELECT	1MF	20%	50V
C4029	⚠1-126-961-91	ELECT	2.2MF	20%	50V
C4031	⚠1-163-105-91	CERAMIC CHIP	33PF	5%	50V
C4032	⚠1-126-963-91	ELECT	4.7MF	20%	50V
C4034	⚠1-137-364-91	FILM	0.001MF	5%	50V
C4035	⚠1-104-660-91	ELECT	47MF	20%	16V
C4036	⚠1-104-660-91	ELECT	47MF	20%	16V
C4037	⚠1-126-963-91	ELECT	4.7MF	20%	50V
C4038	⚠1-126-964-91	ELECT	10MF	20%	50V
C4039	⚠1-126-964-91	ELECT	10MF	20%	50V
C4040	⚠1-126-965-91	ELECT	22MF	20%	50V
C4041	⚠1-126-964-91	ELECT	10MF	20%	50V
C4042	⚠1-126-934-91	ELECT	220MF	20%	16V
C4043	⚠1-136-497-81	FILM	0.1MF	5%	50V
C4044	⚠1-108-377-91	MYLAR	0.01MF	10%	100V
C4045	⚠1-108-365-91	MYLAR	0.001MF	10%	100V
C4046	⚠1-163-021-91	CERAMIC CHIP	0.01F	10%	50V
C4047	⚠1-108-365-91	MYLAR	0.001MF	10%	100V
C4048	⚠1-108-389-91	MYLAR	0.1MF	10%	100V
C4049	⚠1-130-487-91	MYLAR	0.022MF	5%	50V
C4050	⚠1-126-964-91	ELECT	10MF	20%	50V
C4051	⚠1-126-964-91	ELECT	10MF	20%	50V
C4052	⚠1-126-934-91	ELECT	220MF	20%	16V
C4053	⚠1-104-660-91	ELECT	47MF	20%	16V
C4054	⚠1-104-660-91	ELECT	47MF	20%	16V
C4055	⚠1-126-964-91	ELECT	10MF	20%	50V
C4056	⚠1-126-965-91	ELECT	22MF	20%	50V
C4057	⚠1-137-190-81	FILM	0.22MF	5%	50V
C4058	⚠1-126-964-91	ELECT	10MF	20%	50V
C4059	⚠1-126-964-91	ELECT	10MF	20%	50V
C4060	⚠1-126-964-91	ELECT	10MF	20%	50V
C4061	⚠1-126-965-91	ELECT	22MF	20%	50V
C4065	⚠1-104-665-91	ELECT	100MF	20%	25V
C4066	⚠1-104-665-91	ELECT	100MF	20%	25V
C4067	⚠1-108-369-91	MYLAR	0.0022MF	10%	100V
C4068	⚠1-137-364-91	FILM	0.001MF	5%	50V
C4069	⚠1-126-964-91	ELECT	10MF	20%	50V
C4101	⚠1-136-497-81	FILM	0.1MF	5%	50V
C4102	⚠1-136-497-81	FILM	0.1MF	5%	50V
C4103	⚠1-136-497-81	FILM	0.1MF	5%	50V
C4104	⚠1-136-497-81	FILM	0.1MF	5%	50V
C4113	⚠1-126-960-91	ELECT	1MF	20%	50V
C4114	⚠1-130-487-91	MYLAR	0.022MF	5%	50V
C4115	⚠1-108-429-91	MYLAR	0.047MF	10%	200V
C4116	⚠1-107-945-91	ELECT	33MF	20%	160V
C4117	⚠1-126-967-91	ELECT	47MF	20%	50V
C4118	⚠1-107-945-91	ELECT	33MF	20%	160V
C4139	⚠1-126-968-91	ELECT	100MF	20%	50V
C4140	⚠1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C4142	⚠1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C4144	⚠1-137-422-91	FILM	0.1MF	10%	100V
C4145	⚠1-137-422-91	FILM	0.1MF	10%	100V
C4146	⚠1-137-424-51	FILM	0.22MF	10%	100V
C4147	⚠1-137-198-81	FILM	1MF	5%	50V
C4148	⚠1-102-228-91	CERAMIC	470PF	10%	500V

Rf.NO.	PART NO.	DESCRIPTION			REMARK
C4149	⚠1-126-968-91	ELECT	100MF	20%	50V
C4150	⚠1-130-495-91	MYLAR	0.1MF	5%	50V
C4151	⚠1-163-243-91	CERAMIC CHIP	47PF	5%	50V
C4152	⚠1-163-251-91	CERAMIC CHIP	100PF	5%	50V
C4178	⚠1-163-038-91	CERAMIC CHIP	0.1MF		25V
C4179	⚠1-104-664-91	ELECT	47MF	20%	25V
C4180	⚠1-108-595-91	MYLAR	0.047MF	5%	50V
C4302	⚠1-136-497-81	FILM	0.1MF	5%	50V
C4305	⚠1-102-973-91	CERAMIC	100PF	5%	50V
C4306	⚠1-107-637-91	ELECT	22MF	20%	160V
C4308	⚠1-129-765-91	FILM	0.047MF	10%	200V
C4309	⚠1-102-228-91	CERAMIC	470PF	10%	500V
C4315	⚠1-136-113-11	FILM	2MF	5%	200V
C4316	⚠1-136-137-11	FILM	0.006MF	3%	1.6KV
C4317	⚠1-137-420-91	FILM	0.047MF	10%	100V
C4318	⚠1-162-116-91	CERAMIC	680PF	10%	2KV
C4319	⚠1-162-116-91	CERAMIC	680PF	10%	2KV
C4320	⚠1-136-828-11	FILM	1.8MF	5%	200V
C4323	⚠1-126-968-91	ELECT	100MF	20%	50V
C4325	⚠1-126-952-91	ELECT	1000MF	20%	35V
C4327	⚠1-126-964-91	ELECT	10MF	20%	50V
C4328	⚠1-126-964-91	ELECT	10MF	20%	50V
C4329	⚠1-126-964-91	ELECT	10MF	20%	50V
C4330	⚠1-126-968-91	ELECT	100MF	20%	50V
C4331	⚠1-162-134-91	CERAMIC	470PF	10%	2KV
C4332	⚠1-162-134-91	CERAMIC	470PF	10%	2KV
C4401	⚠1-136-485-81	FILM	0.01MF	5%	50V
C4402	⚠1-126-933-91	ELECT	100MF	20%	16V
C4403	⚠1-137-364-91	FILM	0.001MF	5%	50V
C4404	⚠1-107-725-91	CERAMIC CHIP	0.1MF	10%	16V
C4405	⚠1-136-485-81	FILM	0.01MF	5%	50V
C4406	⚠1-126-933-91	ELECT	100MF	20%	16V
C4407	⚠1-126-960-91	ELECT	1MF	20%	50V
C4501	⚠1-162-114-71	CERAMIC	0.0047MF		2KV
C4502	⚠1-126-968-91	ELECT	100MF	20%	50V
C4503	⚠1-137-373-91	FILM	0.033MF	5%	50V
C4506	⚠1-126-964-91	ELECT	10MF	20%	50V
C4508	⚠1-137-369-91	FILM	0.0068MF	5%	50V
C4509	⚠1-136-897-11	FILM	0.021MF	3%	2KV
C4510	⚠1-136-897-11	FILM	0.021MF	3%	2KV
C4511	⚠1-136-897-11	FILM	0.021MF	3%	2KV
C4512	⚠1-136-897-11	FILM	0.021MF	3%	2KV
C4700	⚠1-104-662-91	ELECT	22MF	20%	25V

<CONNECTOR>

Rf.NO.	PART NO.	DESCRIPTION
CN4001	⚠ 1-695-915-21	TAB (CONTACT)
CN4002	⚠* 1-564-506-51	PLUG, CONNECTOR 3P
CN4003	⚠* 1-564-506-51	PLUG, CONNECTOR 3P
CN4004	⚠* 1-564-506-51	PLUG, CONNECTOR 3P
CN4006	⚠* 1-506-371-31	PIN, CONNECTOR 2P
CN4007	⚠* 1-506-371-31	PIN, CONNECTOR 2P
CN4008	⚠* 1-564-509-51	PLUG, CONNECTOR 6P
CN4009	⚠* 1-564-506-51	PLUG, CONNECTOR 3P
CN4010	⚠ 1-695-915-21	TAB (CONTACT)
CN4011	⚠* 1-508-765-21	PIN, CONNECTOR (5mm PITCH) 3P
CN4012	⚠* 1-580-837-11	PIN, CONNECTOR (PC BOARD) 3P
CN4013	⚠ 1-691-960-11	PIN, CONNECTOR (PC BOARD) 3P
CN4014	⚠ 1-695-915-21	TAB (CONTACT)

Rf.NO.	PART NO.	DESCRIPTION	REMARK
CN4101	⚠* 1-564-506-51	PLUG, CONNECTOR 3P	
CN4105	⚠* 1-580-838-11	PIN, CONNECTOR (PC BOARD) 4P	
CN4106	⚠* 1-580-838-11	PIN, CONNECTOR (PC BOARD) 4P	
CN4107	⚠* 1-580-838-11	PIN, CONNECTOR (PC BOARD) 4P	
CN4109	⚠* 1-564-510-51	PLUG, CONNECTOR 7P	
CN4110	⚠* 1-564-511-51	PLUG, CONNECTOR 8P	
CN4111	⚠* 1-564-506-51	PLUG, CONNECTOR 3P	
CN4118	⚠* 1-564-506-61	PLUG, CONNECTOR 3P	
CN4119	⚠* 1-564-506-81	PLUG, CONNECTOR 3P	
CN4126	⚠* 1-564-508-51	PLUG, CONNECTOR 5P	
CN4127	⚠* 1-564-506-51	PLUG, CONNECTOR 3P	
CN4128	⚠* 1-508-766-21	PIN, CONNECTOR (5mm PITCH) 4P	
CN4129	⚠* 1-564-508-81	PLUG, CONNECTOR 5P	
	<DIODE>		
D4001	⚠8-719-923-32	DIODE MTZJ-T-77-5.1	
D4002	⚠8-719-914-47	DIODE DAN202K-T-146	
D4003	⚠8-719-914-47	DIODE DAN202K-T-146	
D4004	⚠8-719-940-94	DIODE RGP15GPKG23	
D4005	⚠8-719-940-94	DIODE RGP15GPKG23	
D4006	⚠8-719-940-94	DIODE RGP15GPKG23	
D4007	⚠8-719-945-80	DIODE ERC06-15S	
D4008	⚠8-719-945-80	DIODE ERC06-15S	
D4009	⚠8-719-033-10	DIODE ERC91-02L9	
D4010	⚠8-719-991-19	DIODE ERC91-02TP11	
D4011	⚠8-719-991-19	DIODE ERC91-02TP11	
D4014	⚠8-719-914-47	DIODE DAN202K-T-146	
D4015	⚠8-719-914-47	DIODE DAN202K-T-146	
D4016	⚠8-719-914-47	DIODE DAN202K-T-146	
D4017	⚠8-719-914-47	DIODE DAN202K-T-146	
D4018	⚠8-719-914-47	DIODE DAN202K-T-146	
D4020	⚠8-719-914-47	DIODE DAN202K-T-146	
D4021	⚠8-719-914-47	DIODE DAN202K-T-146	
D4025	⚠8-719-401-42	DIODE MA3051M-TX	
D4026	⚠8-719-401-42	DIODE MA3051M-TX	
D4027	⚠8-719-914-47	DIODE DAN202K-T-146	
D4028	⚠8-719-028-01	DIODE MA3033L-TX	
D4029	⚠8-719-914-47	DIODE DAN202K-T-146	
D4030	⚠8-719-914-47	DIODE DAN202K-T-146	
D4031	⚠8-719-421-74	DIODE MA3024-TX	
D4032	⚠8-719-914-47	DIODE DAN202K-T-146	
D4033	⚠8-719-914-47	DIODE DAN202K-T-146	
D4034	⚠8-719-402-45	DIODE MA3130-TX	
D4035	⚠8-759-303-98	DIODE HZT33-02TTE	
D4036	⚠8-719-402-45	DIODE MA3130-TX	
D4037	⚠8-719-914-47	DIODE DAN202K-T-146	
D4038	⚠8-719-914-47	DIODE DAN202K-T-146	
D4040	⚠8-719-914-47	DIODE DAN202K-T-146	
D4041	⚠8-719-402-02	DIODE MA3091M-TX	
D4103	⚠8-719-921-20	DIODE 1SS119-25TD	
D4118	⚠8-719-018-82	DIODE RGP02-20EL-6394	
D4122	⚠8-719-936-83	DIODE GP08DPKG23	
D4124	⚠8-719-112-82	DIODE RD12ES-T1B3	
D4150	⚠8-719-921-20	DIODE 1SS119-25TD	
D4151	⚠8-719-921-20	DIODE 1SS119-25TD	
D4152	⚠8-719-974-56	DIODE V11N-52	
D4153	⚠8-719-974-56	DIODE V11N-52	
D4154	⚠8-719-974-56	DIODE V11N-52	
D4155	⚠8-719-974-56	DIODE V11N-52	
D4304	⚠8-719-940-94	DIODE RGP15GPKG23	
D4305	⚠8-719-979-99	DIODE ERD08M-15	
D4307	⚠8-719-921-20	DIODE 1SS119-25TD	
D4308	⚠8-719-921-20	DIODE 1SS119-25TD	
D4401	⚠8-719-921-20	DIODE 1SS119-25TD	
D4402	⚠8-719-921-20	DIODE 1SS119-25TD	
D4403	⚠8-719-921-20	DIODE 1SS119-25TD	
D4406	⚠8-719-921-20	DIODE 1SS119-25TD	
D4407	⚠8-719-921-20	DIODE 1SS119-25TD	
D4408	⚠8-719-921-20	DIODE 1SS119-25TD	
	<IC>		
IC4001	⚠8-759-276-28	IC LM393PS-E20	
IC4002	⚠8-759-133-90	IC uPC339C	
⧓ IC4003	⚠8-759-745-58	IC NJM4558D	
IC4004	⚠8-759-711-28	IC NJM2058D	
IC4005	⚠8-759-701-79	IC NJM7812FA	
	⚠4-382-854-11	SCREW (M3X10), P, SW (+) ; IC4005	
IC4006	⚠8-759-701-88	IC NJM7912FA	
	⚠4-382-854-11	SCREW (M3X10), P, SW (+) ; IC4006	
IC4101	⚠8-759-445-87	IC LM2940CT-15	
	⚠4-382-854-11	SCREW (M3X10), P, SW (+) ; IC4101	
IC4103	⚠8-759-345-38	IC HD14538BP	
IC4105	⚠8-759-192-71	IC STV9379	
	⚠4-382-854-11	SCREW (M3X10), P, SW (+) ; IC4105	
IC4110	⚠8-759-701-79	IC NJM7812FA	
	⚠4-382-854-11	SCREW (M3X10), P, SW (+) ; IC4110	
IC4501	⚠8-759-431-39	IC MAX8213BCSE-TE2	
IC4502	⚠8-759-511-33	IC TL431CLP-Z	
	<COIL>		
L4001	⚠1-406-977-21	COIL, CHOKE 100UH	
L4002	⚠1-422-613-21	COIL, AIR CORE	
L4004	⚠1-410-671-41	INDUCTOR 47UH	
L4005	⚠1-410-671-41	INDUCTOR 47UH	
L4102	⚠1-406-975-21	COIL, CHOKE 47UH	
L4103	⚠1-406-975-21	COIL, CHOKE 47UH	
L4106	⚠1-412-524-21	INDUCTOR 8.2UH	
L4107	⚠1-406-975-21	COIL, CHOKE 47UH	
L4301	⚠1-459-111-11	COIL, DRAM CORE (CDI)	
L4302	⚠1-459-111-11	COIL, DRAM CORE (CDI)	
L4307	⚠1-406-975-21	COIL, CHOKE 47UH	
	<NEON LAMP>		
NL4001	⚠1-519-237-14	LAMP, NEON	
	<TRANSISTOR>		
Q4001	⚠8-729-119-80	TRANSISTOR 2SC2688-LK	
Q4002	⚠8-729-017-71	TRANSISTOR 2SA1221-T-M	
Q4003	⚠8-729-119-80	TRANSISTOR 2SC2688-LK	
Q4004	⚠8-729-231-56	TRANSISTOR 2SC2878AB-TPE2	
Q4005	⚠8-729-821-07	TRANSISTOR 2SC3997CA	
	⚠4-365-216-01	SPACER, MICA ; Q4005	
	⚠4-382-854-11	SCREW (M3X10), P, SW (+) ; Q4005	

Rf.NO.	PART NO.	DESCRIPTION	REMARK
Q4006	⚠8-729-926-77	TRANSISTOR IRFI640	
	⚠4-382-854-11	SCREW (M3X10), P, SW (+) ; Q4006	
Q4007	⚠8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR	
Q4008	⚠8-729-114-92	TRANSISTOR 2SB734-T-4	
Q4009	⚠8-729-141-00	TRANSISTOR 2SD774-T-34	
Q4010	⚠8-729-231-56	TRANSISTOR 2SC2878AB-TPE2	
Q4011	⚠8-729-920-75	TRANSISTOR 2SC2412K-T-146-QR	
Q4012	⚠8-729-920-75	TRANSISTOR 2SC2412K-T-146-QR	
Q4013	⚠8-729-920-75	TRANSISTOR 2SC2412K-T-146-QR	
Q4014	⚠8-729-920-75	TRANSISTOR 2SC2412K-T-146-QR	
Q4015	⚠8-729-920-75	TRANSISTOR 2SC2412K-T-146-QR	
Q4016	⚠8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR	
Q4017	⚠8-729-902-21	TRANSISTOR 2SA1037K-T-146-R	
Q4019	⚠8-729-920-75	TRANSISTOR 2SC2412K-T-146-QR	
Q4020	⚠8-729-920-75	TRANSISTOR 2SC2412K-T-146-QR	
Q4021	⚠8-729-900-81	TRANSISTOR DTC114ES-TP	
Q4022	⚠8-729-900-81	TRANSISTOR DTC114ES-TP	
Q4103	⚠8-729-423-32	TRANSISTOR 2SC3311A-STA	
Q4104	⚠8-729-423-47	TRANSISTOR 2SA1309A-STA	
Q4105	⚠8-729-423-47	TRANSISTOR 2SA1309A-STA	
Q4106	⚠8-729-230-19	TRANSISTOR 2SA1013-R-TPE6	
Q4107	⚠8-729-230-19	TRANSISTOR 2SA1013-R-TPE6	
Q4108	⚠8-729-304-92	TRANSISTOR 2SB649A-C	
Q4109	⚠8-729-303-86	TRANSISTOR 2SA1492-Y	
	⚠4-365-216-01	SPACER, MICA ; Q4109	
	⚠4-382-854-11	SCREW (M3X10), P, SW (+) ; Q4109	
Q4304	⚠8-729-231-14	TRANSISTOR 2SA1015TP-GR	
Q4308	⚠8-729-119-80	TRANSISTOR 2SC2688-LK	
Q4315	⚠8-729-821-07	TRANSISTOR 2SC3997CA	
	⚠4-365-216-01	SPACER, MICA ; Q4315	
	⚠4-382-854-11	SCREW (M3X10), P, SW (+) ; Q4315	
Q4401	⚠8-729-900-81	TRANSISTOR DTC114ES-TP	
Q4405	⚠8-729-900-81	TRANSISTOR DTC114ES-TP	
Q4502	⚠8-729-920-75	TRANSISTOR 2SC2412K-T-146-QR	
Q4505	⚠8-729-920-75	TRANSISTOR 2SC2412K-T-146-QR	
Q4506	⚠8-729-823-81	TRANSISTOR 2SC4632LS-CB7	
	⚠4-382-854-11	SCREW (M3X10), P, SW (+) ; Q4506	

<RESISTOR>

Rf.NO.	PART NO.	DESCRIPTION				REMARK
R4001	⚠1-249-425-91	CARBON	4.7K	5%	1/4W	F
R4002	⚠1-247-839-91	CARBON	2.2K	5%	1/4W	
R4003	⚠1-249-431-91	CARBON	15K	5%	1/4W	F
R4004	⚠1-216-059-91	METAL GLAZE	2.7K	5%	1/10W	
R4005	⚠1-260-325-71	CARBON	560	5%	1/2W	F
R4006	⚠1-216-097-91	METAL GLAZE	100K	5%	1/10W	
R4007	⚠1-249-429-91	CARBON	10K	5%	1/4W	F
R4008	⚠1-216-435-71	METAL OXIDE	2.7K	5%	1W	F
R4009	⚠1-216-487-71	METAL OXIDE	12K	5%	3W	F
R4010	⚠1-216-295-91	CONDUCTOR, CHIP				
R4011	⚠1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R4012	⚠1-216-489-71	METAL OXIDE	27K	5%	3W	F
R4013	⚠1-216-025-91	METAL GLAZE	100	5%	1/10W	
R4014	⚠1-215-917-71	METAL OXIDE	1K	5%	3W	F
R4015	⚠1-215-880-71	METAL OXIDE	10	5%	2W	F
R4016	⚠1-216-065-91	METAL GLAZE	4.7K	5%	1/10W	
R4017	⚠1-216-434-71	METAL OXIDE	1.8K	5%	1W	F
R4018	⚠1-215-924-71	METAL OXIDE	15K	5%	3W	F
⧓ R4019	⚠	METAL			1/4W	
R4020	⚠1-216-055-91	METAL GLAZE	1.8K	5%	1/10W	
R4021	⚠1-211-802-71	FUSIBLE	3.3	5%	1/2W	F
R4024	⚠1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R4025	⚠1-216-073-91	METAL GLAZE	10K	5%	1/10W	
R4026	⚠1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R4027	⚠1-260-316-71	CARBON	100	5%	1/2W	F
R4028	⚠1-260-316-71	CARBON	100	5%	1/2W	F
R4029	⚠1-216-073-91	METAL GLAZE	10K	5%	1/10W	
R4030	⚠1-216-057-91	METAL GLAZE	2.2K	5%	1/10W	
R4031	⚠1-216-059-91	METAL GLAZE	2.7K	5%	1/10W	
R4032	⚠1-216-059-91	METAL GLAZE	2.7K	5%	1/10W	
R4033	⚠1-216-113-91	METAL GLAZE	470K	5%	1/10W	
R4034	⚠1-216-091-91	METAL GLAZE	56K	5%	1/10W	
R4035	⚠1-216-073-91	METAL GLAZE	10K	5%	1/10W	
R4036	⚠1-216-077-91	METAL GLAZE	15K	5%	1/10W	
R4038	⚠1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R4039	⚠1-249-377-91	CARBON	0.47	5%	1/4W	F
R4040	⚠1-216-073-91	METAL GLAZE	10K	5%	1/10W	
R4041	⚠1-216-295-91	CONDUCTOR, CHIP				
R4042	⚠1-216-067-91	METAL GLAZE	5.6K	5%	1/10W	
R4043	⚠1-216-073-91	METAL GLAZE	10K	5%	1/10W	
R4044	⚠1-216-067-91	METAL GLAZE	5.6K	5%	1/10W	
R4045	⚠1-216-065-91	METAL GLAZE	4.7K	5%	1/10W	
R4046	⚠1-216-073-91	METAL GLAZE	10K	5%	1/10W	
R4048	⚠1-216-073-91	METAL GLAZE	10K	5%	1/10W	
R4049	⚠1-216-059-91	METAL GLAZE	2.7K	5%	1/10W	
R4051	⚠1-216-073-91	METAL GLAZE	10K	5%	1/10W	
R4052	⚠1-216-059-91	METAL GLAZE	2.7K	5%	1/10W	
R4053	⚠1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R4054	⚠1-216-087-91	METAL GLAZE	39K	5%	1/10W	
R4055	⚠1-216-053-91	METAL GLAZE	1.5K	5%	1/10W	
R4057	⚠1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R4058	⚠1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R4059	⚠1-216-077-91	METAL GLAZE	15K	5%	1/10W	
R4060	⚠1-216-073-91	METAL GLAZE	10K	5%	1/10W	
R4061	⚠1-216-025-91	METAL GLAZE	100	5%	1/10W	
R4062	⚠1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R4063	⚠1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R4064	⚠1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R4066	⚠1-216-053-91	METAL GLAZE	1.5K	5%	1/10W	
R4067	⚠1-216-295-91	CONDUCTOR, CHIP				
R4068	⚠1-216-097-91	METAL GLAZE	100K	5%	1/10W	
R4069	⚠1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R4070	⚠1-216-097-91	METAL GLAZE	100K	5%	1/10W	
R4073	⚠1-216-669-91	METAL CHIP	5.6K	0.50%	1/10W	
R4074	⚠1-218-754-91	METAL CHIP	120K	0.50%	1/10W	
R4075	⚠1-218-756-91	METAL CHIP	150K	0.50%	1/10W	
R4076	⚠1-216-675-91	METAL CHIP	10K	0.50%	1/10W	
R4077	⚠1-216-073-91	METAL GLAZE	10K	5%	1/10W	
R4078	⚠1-215-451-91	METAL	18K	1%	1/4W	
R4079	⚠1-216-077-91	METAL GLAZE	15K	5%	1/10W	
R4080	⚠1-215-449-91	METAL	15K	1%	1/4W	
R4081	⚠1-214-731-71	METAL	1.2K	1%	1/4W	
R4082	⚠1-214-757-71	METAL	15K	1%	1/4W	
R4083	⚠1-214-757-71	METAL	15K	1%	1/4W	
R4084	⚠1-214-757-71	METAL	15K	1%	1/4W	
R4085	⚠1-214-757-71	METAL	15K	1%	1/4W	
R4086	⚠1-216-093-91	METAL GLAZE	68K	5%	1/10W	
R4087	⚠1-216-025-91	METAL GLAZE	100	5%	1/10W	
R4088	⚠1-216-121-91	METAL GLAZE	1M	5%	1/10W	
R4089	⚠1-216-097-91	METAL GLAZE	100K	5%	1/10W	

Rf.NO.	PART NO.	DESCRIPTION			REMARK	
R4090	⚠1-216-097-91	METAL GLAZE	100K	5%	1/10W	
R4091	⚠1-216-043-91	METAL GLAZE	560	5%	1/10W	
R4092	⚠1-216-041-91	METAL GLAZE	470	5%	1/10W	
R4093	⚠1-216-073-91	METAL GLAZE	10K	5%	1/10W	
R4094	⚠1-216-057-91	METAL GLAZE	2.2K	5%	1/10W	
R4095	⚠1-216-073-91	METAL GLAZE	10K	5%	1/10W	
R4096	⚠1-216-081-91	METAL GLAZE	22K	5%	1/10W	
R4097	⚠1-216-671-91	METAL CHIP	6.8K	0.50%	1/10W	
⧓ R4098	⚠	METAL CHIP			1/10W	
R4099	⚠1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R4100	⚠1-216-682-91	METAL CHIP	20K	0.50%	1/10W	
R4102	⚠1-216-462-71	METAL OXIDE	8.2K	5%	2W	F
R4103	⚠1-215-897-71	METAL OXIDE	6.8K	5%	2W	F
R4104	⚠1-216-025-91	METAL GLAZE	100	5%	1/10W	
R4105	⚠1-211-802-71	FUSIBLE	3.3	5%	1/2W	F
R4106	⚠1-216-073-91	METAL GLAZE	10K	5%	1/10W	
R4107	⚠1-216-059-91	METAL GLAZE	2.7K	5%	1/10W	
R4109	⚠1-216-101-91	METAL GLAZE	150K	5%	1/10W	
R4110	⚠1-216-093-91	METAL GLAZE	68K	5%	1/10W	
R4111	⚠1-216-073-91	METAL GLAZE	10K	5%	1/10W	
R4112	⚠1-216-073-91	METAL GLAZE	10K	5%	1/10W	
R4113	⚠1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R4114	⚠1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R4115	⚠1-216-073-91	METAL GLAZE	10K	5%	1/10W	
R4116	⚠1-216-073-91	METAL GLAZE	10K	5%	1/10W	
R4117	⚠1-202-815-91	SOLID	47K	10%	1/2W	
R4119	⚠1-216-081-91	METAL GLAZE	22K	5%	1/10W	
R4207	⚠1-247-807-91	CARBON	100	5%	1/4W	
R4208	⚠1-202-541-92	SOLID	47	10%	1/2W	
R4209	⚠1-247-855-91	CARBON	10K	5%	1/4W	
R4210	⚠1-247-855-91	CARBON	10K	5%	1/4W	
R4211	⚠1-247-831-91	CARBON	1K	5%	1/4W	
R4212	⚠1-247-807-91	CARBON	100	5%	1/4W	
R4213	⚠1-215-429-91	METAL	2.2K	1%	1/4W	
R4214	⚠1-215-429-91	METAL	2.2K	1%	1/4W	
R4215	⚠1-215-437-91	METAL	4.7K	1%	1/4W	
R4216	⚠1-215-433-91	METAL	3.3K	1%	1/4W	
R4217	⚠1-215-442-91	METAL	7.5K	1%	1/4W	
R4218	⚠1-215-443-91	METAL	8.2K	1%	1/4W	
R4219	⚠1-215-437-91	METAL	4.7K	1%	1/4W	
R4220	⚠1-247-831-91	CARBON	1K	5%	1/4W	
R4221	⚠1-247-871-91	CARBON	47K	5%	1/4W	
R4222	⚠1-249-421-91	CARBON	2.2K	5%	1/4W	F
R4223	⚠1-215-900-71	METAL OXIDE	22K	5%	2W	F
R4224	⚠1-247-831-91	CARBON	1K	5%	1/4W	
R4225	⚠1-247-855-91	CARBON	10K	5%	1/4W	
R4226	⚠1-249-430-91	CARBON	12K	5%	1/4W	F
R4227	⚠1-249-423-91	CARBON	3.3K	5%	1/4W	F
R4228	⚠1-260-334-71	CARBON	3.3K	5%	1/2W	F
R4229	⚠1-215-925-71	METAL OXIDE	22K	5%	3W	F
R4230	⚠1-249-417-91	CARBON	1K	5%	1/4W	F
R4231	⚠1-216-041-91	METAL GLAZE	470	5%	1/10W	
R4232	⚠1-216-073-91	METAL GLAZE	10K	5%	1/10W	
R4260	⚠1-216-675-91	METAL CHIP	10K	0.50%	1/10W	
R4261	⚠1-216-651-91	METAL CHIP	1K	0.50%	1/10W	
R4262	⚠1-216-295-91	CONDUCTOR, CHIP				
R4263	⚠1-216-675-91	METAL CHIP	10K	0.50%	1/10W	
R4264	⚠1-215-913-71	METAL OXIDE	220	5%	3W	F
R4265	⚠1-214-808-11	METAL	4.7	1%	1/2W	
R4266	⚠1-214-808-81	METAL	4.7	1%	1/2W	

Rf.NO.	PART NO.	DESCRIPTION			REMARK	
R4267	⚠1-214-808-81	METAL	4.7	1%	1/2W	
R4268	⚠1-216-683-91	METAL CHIP	22K	0.50%	1/10W	
R4269	⚠1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R4270	⚠1-216-295-91	CONDUCTOR, CHIP				
R4271	⚠1-216-679-91	METAL CHIP	15K	0.50%	1/10W	
R4273	⚠1-216-081-91	METAL GLAZE	22K	5%	1/10W	
R4274	⚠1-216-085-91	METAL GLAZE	33K	5%	1/10W	
R4275	⚠1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R4312	⚠1-247-831-91	CARBON	1K	5%	1/4W	
R4313	⚠1-247-851-91	CARBON	6.8K	5%	1/4W	
R4314	⚠1-247-831-91	CARBON	1K	5%	1/4W	
R4315	⚠1-247-851-91	CARBON	6.8K	5%	1/4W	
R4316	⚠1-247-831-91	CARBON	1K	5%	1/4W	
R4317	⚠1-216-097-91	METAL GLAZE	100K	5%	1/10W	
R4318	⚠1-216-117-91	METAL GLAZE	680K	5%	1/10W	
R4326	⚠1-214-808-81	METAL	4.7	1%	1/2W	
R4327	⚠1-249-383-91	CARBON	1.5	5%	1/4W	F
R4405	⚠1-247-831-91	CARBON	1K	5%	1/4W	
R4410	⚠1-247-831-91	CARBON	1K	5%	1/4W	
R4414	⚠1-247-843-91	CARBON	3.3K	5%	1/4W	
R4421	⚠1-215-922-71	METAL OXIDE	6.8K	5%	3W	F
R4423	⚠1-215-922-71	METAL OXIDE	6.8K	5%	3W	F
R4424	⚠1-215-873-71	METAL OXIDE	4.7K	5%	1W	F
R4433	⚠1-216-389-71	METAL OXIDE	1	5%	3W	F
R4434	⚠1-215-857-71	METAL OXIDE	10	5%	1W	F
R4447	⚠1-247-871-91	CARBON	47K	5%	1/4W	
R4502	⚠1-216-063-91	METAL GLAZE	3.9K	5%	1/10W	
R4503	⚠1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R4504	⚠1-215-443-91	METAL	8.2K	1%	1/4W	
R4505	⚠1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R4506	⚠1-215-926-71	METAL OXIDE	33K	5%	3W	F
R4507	⚠1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R4508	⚠1-216-065-91	METAL GLAZE	4.7K	5%	1/10W	
R4510	⚠1-215-926-71	METAL OXIDE	33K	5%	3W	F
R4513	⚠1-215-926-71	METAL OXIDE	33K	5%	3W	F
R4514	⚠1-216-025-91	METAL GLAZE	100	5%	1/10W	
R4515	⚠1-216-033-91	METAL GLAZE	220	5%	1/10W	
R4516	⚠1-216-295-91	CONDUCTOR, CHIP				
R4517	⚠1-216-045-91	METAL GLAZE	680	5%	1/10W	
R4518	⚠1-202-868-91	SOLID	1K	20%	1/2W	
R4519	⚠1-202-549-81	SOLID	100	20%	1/2W	
R4520	⚠1-215-926-71	METAL OXIDE	33K	5%	3W	F
R4601	⚠1-247-831-91	CARBON	1K	5%	1/4W	
R4602	⚠1-247-855-91	CARBON	10K	5%	1/4W	
R4603	⚠1-247-879-91	CARBON	100K	5%	1/4W	
R4608	⚠1-247-831-91	CARBON	1K	5%	1/4W	
R4609	⚠1-247-871-91	CARBON	47K	5%	1/4W	
R4610	⚠1-247-891-91	CARBON	330K	5%	1/4W	
R4611	⚠1-216-651-91	METAL CHIP	1K	0.50%	1/10W	

<SPARK GAP>

Rf.NO.	PART NO.	DESCRIPTION
SG4501	⚠1-519-422-21	GAP, SPARK

<TRANSFORMER>

Rf.NO.	PART NO.	DESCRIPTION
⧓ T4001	⚠1-437-209-21	TRANSFORMER, HORIZONTAL DRIVE
⧓ T4002	⚠1-439-508-21	TRANSFORMER, FERRITE (LOT)
T4003	⚠1-453-160-12	TRANSFORMER ASSY, FLYBACK (NX-3041//J1E)

Rf.NO.	PART NO.	DESCRIPTION			REMARK
T4501	⚠1-437-209-21	TRANSFORMER, HORIZONTAL DRIVE			
	* A-1343-298-A	DM BOARD, COMPLETE			
		<CONNECTOR>			
CN201	* 1-564-511-11	PLUG, CONNECTOR 8P			
CN202	* 1-564-510-11	PLUG, CONNECTOR 7P			
CN203	* 1-564-515-11	PLUG, CONNECTOR 12P			
CN206	* 1-564-511-11	PLUG, CONNECTOR 8P			
CN208	1-560-731-00	HEADER, PIN 50P			
CN217	* 1-564-506-11	PLUG, CONNECTOR 3P			
	* A-1343-313-A	E2 BOARD, COMPLETE			
		<CAPACITOR>			
C9000	1-126-964-11	ELECT	10MF	20%	50V
C9001	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C9002	1-109-889-11	ELECT	1MF	20%	50V
C9003	1-126-964-11	ELECT	10MF	20%	50V
C9004	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C9005	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C9006	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C9007	1-126-964-11	ELECT	10MF	20%	50V
C9008	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C9009	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C9010	1-109-889-11	ELECT	1MF	20%	50V
C9011	1-126-964-11	ELECT	10MF	20%	50V
C9012	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C9013	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C9014	1-126-964-11	ELECT	10MF	20%	50V
C9015	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C9016	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C9017	1-109-889-11	ELECT	1MF	20%	50V
C9018	1-126-964-11	ELECT	10MF	20%	50V
C9019	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C9020	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C9021	1-126-964-11	ELECT	10MF	20%	50V
C9022	1-126-964-11	ELECT	10MF	20%	50V
C9023	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C9024	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C9026	1-126-964-11	ELECT	10MF	20%	50V
C9027	1-126-969-11	ELECT	220MF	20%	50V
C9028	1-126-968-11	ELECT	100MF	20%	50V
C9029	1-107-636-11	ELECT	10MF	20%	160V
C9030	1-107-370-11	FILM	0.1MF	10%	200V
C9031	1-126-964-11	ELECT	10MF	20%	50V
C9032	1-107-364-11	FILM	0.01MF	10%	200V
C9033	1-107-364-11	FILM	0.01MF	10%	200V
C9034	1-107-667-11	ELECT	2.2MF	20%	160V
C9035	1-107-667-11	ELECT	2.2MF	20%	160V
C9036	1-102-157-00	CERAMIC	560PF	10%	500V
C9037	1-107-364-11	FILM	0.01MF	10%	200V
C9038	1-107-667-11	ELECT	2.2MF	20%	160V
C9039	1-107-667-11	ELECT	2.2MF	20%	160V
C9040	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C9041	1-126-964-11	ELECT	10MF	20%	50V
C9042	1-126-964-11	ELECT	10MF	20%	50V
C9043	1-126-964-11	ELECT	10MF	20%	50V
C9044	1-107-370-11	FILM	0.1MF	10%	200V
C9045	1-136-159-00	FILM	0.033MF	5%	50V
C9046	1-136-159-00	FILM	0.033MF	5%	50V
C9047	1-136-159-00	FILM	0.033MF	5%	50V
		<CONNECTOR>			
CN9001	* 1-564-509-11	PLUG, CONNECTOR 6P			
CN9002	* 1-564-508-11	PLUG, CONNECTOR 5P			
CN9003	* 1-508-766-00	PIN, CONNECTOR (5mm PITCH) 4P			
CN9004	* 1-564-506-11	PLUG, CONNECTOR 3P			
CN9005	* 1-564-506-11	PLUG, CONNECTOR 3P			
CN9006	* 1-564-506-11	PLUG, CONNECTOR 3P			
CN9007	* 1-564-506-11	PLUG, CONNECTOR 3P			
CN9008	* 1-564-510-11	PLUG, CONNECTOR 7P			
CN9009	* 1-508-765-00	PIN, CONNECTOR (5mm PITCH) 3P			
		<DIODE>			
D9000	8-719-801-78	DIODE 1SS184			
D9001	8-719-801-78	DIODE 1SS184			
D9002	8-719-801-78	DIODE 1SS184			
D9003	8-719-801-78	DIODE 1SS184			
D9004	8-719-801-78	DIODE 1SS184			
D9005	8-719-801-78	DIODE 1SS184			
D9006	8-719-901-83	DIODE 1SS83			
D9007	8-719-109-85	DIODE RD5.1ESB2			
D9008	8-719-109-85	DIODE RD5.1ESB2			
D9009	8-719-109-88	DIODE RD5.6ESB1			
D9010	8-719-901-83	DIODE 1SS83			
D9012	8-719-110-47	DIODE RD18ESB			
D9013	8-719-801-78	DIODE 1SS184			
D9014	8-719-801-78	DIODE 1SS184			
D9015	8-719-801-78	DIODE 1SS184			
D9016	8-719-801-78	DIODE 1SS184			
D9017	8-719-801-78	DIODE 1SS184			
D9018	8-719-801-78	DIODE 1SS184			
D9019	8-719-801-78	DIODE 1SS184			
D9020	8-719-801-78	DIODE 1SS184			
D9021	8-719-911-19	DIODE 1SS119-25			
D9022	8-719-911-19	DIODE 1SS119-25			
D9023	8-719-911-19	DIODE 1SS119-25			
D9024	8-719-911-19	DIODE 1SS119-25			
D9025	8-719-901-83	DIODE 1SS83			
		<IC>			
IC9000	8-759-981-48	IC TL082M			
IC9001	8-759-981-48	IC TL082M			
IC9002	8-759-981-48	IC TL082M			
IC9003	8-759-981-48	IC TL082M			
IC9004	8-759-981-48	IC TL082M			
IC9005	8-759-981-48	IC TL082M			
IC9006	8-759-360-83	IC TDA6111Q/N4			
IC9007	8-759-247-67	IC LM2990T-5.0			
IC9008	8-759-231-58	IC TA7812S			

Rf.NO.	PART NO.	DESCRIPTION				REMARK
		<TRANSISTOR>				
Q9000	8-729-804-48	TRANSISTOR 2SC3675				
Q9001	8-729-804-48	TRANSISTOR 2SC3675				
Q9002	8-729-804-48	TRANSISTOR 2SC3675				
Q9003	8-729-173-38	TRANSISTOR 2SA733-K				
Q9004	8-729-173-38	TRANSISTOR 2SA733-K				
Q9005	8-729-821-02	TRANSISTOR 2SC3503-DE				
Q9006	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q9007	8-729-119-78	TRANSISTOR 2SC2785-HFE				
		<RESISTOR>				
R9000	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R9001	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R9002	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R9003	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R9004	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R9005	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R9006	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R9007	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R9008	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R9009	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R9010	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R9011	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R9012	1-216-063-91	METAL GLAZE	3.9K	5%	1/10W	
R9013	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R9014	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R9015	1-202-731-00	SOLID	10M	20%	1/2W	
R9016	1-202-838-00	SOLID	100K	20%	1/2W	
R9017	1-202-549-00	SOLID	100	20%	1/2W	
R9018	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R9019	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R9020	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R9021	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R9022	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R9023	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R9024	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R9025	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R9026	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R9027	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R9028	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R9029	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R9030	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R9031	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R9032	1-216-063-91	METAL GLAZE	3.9K	5%	1/10W	
R9033	1-202-838-00	SOLID	100K	20%	1/2W	
R9034	1-202-731-00	SOLID	10M	20%	1/2W	
R9035	1-202-549-00	SOLID	100	20%	1/2W	
R9036	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R9037	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R9038	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R9039	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R9040	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R9041	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R9042	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R9043	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R9044	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R9045	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R9046	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R9047	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R9048	1-216-063-91	METAL GLAZE	3.9K	5%	1/10W	
R9049	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R9050	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R9051	1-202-838-00	SOLID	100K	20%	1/2W	
R9052	1-202-731-00	SOLID	10M	20%	1/2W	
R9053	1-202-549-00	SOLID	100	20%	1/2W	
R9054	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R9055	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R9056	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R9058	1-216-097-91	METAL GLAZE	100K	5%	1/10W	
R9059	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R9060	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R9061	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R9062	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R9064	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R9065	1-249-421-11	CARBON	2.2K	5%	1/4W	
R9066	1-247-807-31	CARBON	100	5%	1/4W	
R9067	1-249-419-11	CARBON	1.5K	5%	1/4W	
R9068	1-249-440-11	CARBON	82K	5%	1/4W	
R9069	1-249-416-11	CARBON	820	5%	1/4W	
R9070	1-249-435-11	CARBON	33K	5%	1/4W	
R9071	1-249-419-11	CARBON	1.5K	5%	1/4W	
R9072	1-249-428-11	CARBON	8.2K	5%	1/4W	
R9073	1-249-416-11	CARBON	820	5%	1/4W	
R9074	1-202-816-11	SOLID	68K	20%	1/2W	
R9075	1-249-429-11	CARBON	10K	5%	1/4W	
R9076	1-202-549-00	SOLID	100	20%	1/2W	
R9077	1-202-549-00	SOLID	100	20%	1/2W	
R9078	1-202-549-00	SOLID	100	20%	1/2W	
R9079	1-215-919-11	METAL OXIDE	2.2K	5%	3W	F
R9080	1-215-919-11	METAL OXIDE	2.2K	5%	3W	F
R9081	1-215-919-11	METAL OXIDE	2.2K	5%	3W	F
R9082	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R9083	1-202-813-00	SOLID	22K	20%	1/2W	

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* A-1346-570-A D BOARD, COMPLETE

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Rf.NO.	PART NO.	DESCRIPTION				REMARK
	7-682-952-09	SCREW +PSW 3X16				
		<CAPACITOR>				
C5001	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C5002	1-163-139-00	CERAMIC CHIP	820PF	5%	50V	
C5003	1-163-127-00	CERAMIC CHIP	270PF	5%	50V	
C5004	1-164-756-11	CERAMIC CHIP	0.0033MF	5%	50V	
C5005	1-126-960-11	ELECT	1M	20%	50V	
C5006	1-126-959-11	ELECT	0.47MF	20%	50V	
C5007	1-104-551-11	FILM CHIP	0.01MF	5%	16V	
C5008	1-163-145-00	CERAMIC CHIP	0.0015MF	5%	50V	
C5009	1-163-038-91	CERAMIC CHIP	0.1MF		25V	
C5010	1-126-934-11	ELECT	220MF	20%	16V	
C5011	1-126-967-11	ELECT	47MF	20%	16V	
C5012	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C5013	1-104-664-11	ELECT	47MF	20%	25V	
C5014	1-163-038-91	CERAMIC CHIP	0.1MF		25V	
C5015	1-104-664-11	ELECT	47MF	20%	25V	
C5016	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	

Rf.NO.	PART NO.	DESCRIPTION			REMARK
C5017	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5018	1-126-960-11	ELECT	1MF	20%	50V
C5019	1-130-483-00	MYLAR	0.01MF	5%	50V
C5020	1-126-960-11	ELECT	1MF	20%	50V
C5021	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5022	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5023	1-126-964-11	ELECT	10MF	20%	50V
C5024	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5025	1-126-960-11	ELECT	1MF	20%	50V
C5026	1-130-483-00	MYLAR	0.01MF	5%	50V
C5027	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5028	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5029	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5030	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5031	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5032	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5033	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5034	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5035	1-104-664-11	ELECT	47MF	20%	25V
C5036	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5037	1-104-664-11	ELECT	47MF	20%	25V
C5038	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5039	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5040	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5041	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5042	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5043	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5044	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5045	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5046	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5047	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5050	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5051	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5056	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5061	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5062	1-104-664-11	ELECT	47MF	20%	25V
C5063	1-104-664-11	ELECT	47MF	20%	25V
C5064	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5065	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5066	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5067	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C5068	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C5069	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C5070	1-162-568-11	CERAMIC CHIP	0.33MF	10%	16V
C5071	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C5072	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5073	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C5074	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5075	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5076	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C5077	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C5078	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5079	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5080	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5081	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5082	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5083	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5084	1-104-664-11	ELECT	47MF	20%	25V
C5085	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5086	1-104-664-11	ELECT	47MF	20%	25V
C5087	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5088	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5089	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5090	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5091	1-104-664-11	ELECT	47MF	20%	25V
C5092	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5093	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5094	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5095	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5096	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5097	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5098	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5099	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C5100	1-126-967-11	ELECT	47MF	20%	16V
C5101	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5102	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5103	1-126-967-11	ELECT	47MF	20%	16V
C5104	1-126-960-11	ELECT	1MF	20%	50V
C5105	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C5106	1-126-960-11	ELECT	1MF	20%	50V
C5107	1-126-959-11	ELECT	0.47MF	20%	50V
C5108	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C5109	1-126-960-11	ELECT	1MF	20%	50V
C5110	1-136-171-00	FILM	0.33MF	5%	50V
C5111	1-104-664-11	ELECT	47MF	20%	25V
C5112	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5113	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5114	1-104-664-11	ELECT	47MF	20%	25V
C5115	1-128-551-11	ELECT	22MF	20%	25V
C5116	1-136-165-00	FILM	0.1MF	5%	50V
C5117	1-126-960-11	ELECT	1MF	20%	50V
C5118	1-126-963-11	ELECT	4.7MF	20%	50V
C5119	1-136-169-00	FILM	0.22MF	5%	50V
C5120	1-126-933-11	ELECT	100MF	20%	16V
C5121	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5122	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5123	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5124	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5125	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5126	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5127	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5128	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5129	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5130	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5131	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5132	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5133	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5134	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5135	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5136	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5137	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5138	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5139	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5140	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5141	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5142	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5143	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5144	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5145	1-163-038-91	CERAMIC CHIP	0.1MF		25V

Rf.NO.	PART NO.	DESCRIPTION			REMARK
C5146	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5147	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5148	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5149	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5150	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5151	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5152	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5153	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5154	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5155	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5156	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5157	1-126-968-11	ELECT	100MF	20%	50V
C5158	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5159	1-126-968-11	ELECT	100MF	20%	50V
C5160	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5161	1-126-968-11	ELECT	100MF	20%	50V
C5162	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5163	1-126-968-11	ELECT	100MF	20%	50V
C5164	1-126-968-11	ELECT	100MF	20%	50V
C5165	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5166	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5167	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5168	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5169	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5170	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5171	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5172	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5173	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5174	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5175	1-126-968-11	ELECT	100MF	20%	50V
C5176	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5177	1-126-968-11	ELECT	100MF	20%	50V
C5178	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5179	1-126-968-11	ELECT	100MF	20%	50V
C5180	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5181	1-126-968-11	ELECT	100MF	20%	50V
C5182	1-104-665-11	ELECT	100MF	20%	25V
C5183	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5184	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5185	1-104-665-11	ELECT	100MF	20%	25V
C5186	1-104-665-11	ELECT	100MF	20%	25V
C5187	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5188	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5189	1-104-665-11	ELECT	100MF	20%	25V
C5190	1-104-665-11	ELECT	100MF	20%	25V
C5191	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5192	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5193	1-104-665-11	ELECT	100MF	20%	25V
C5194	1-104-665-11	ELECT	100MF	20%	25V
C5195	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5196	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5197	1-104-665-11	ELECT	100MF	20%	25V
C5198	1-126-968-11	ELECT	100MF	20%	50V
C5199	1-126-968-11	ELECT	100MF	20%	50V
C5200	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5201	1-104-664-11	ELECT	47MF	20%	25V
C5202	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5203	1-104-664-11	ELECT	47MF	20%	25V
C5204	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5205	1-104-664-11	ELECT	47MF	20%	25V

Rf.NO.	PART NO.	DESCRIPTION			REMARK
C5206	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5207	1-104-664-11	ELECT	47MF	20%	25V
C5208	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5209	1-126-968-11	ELECT	100MF	20%	50V
C5210	1-163-143-00	CERAMIC CHIP	0.0012MF	5%	50V
C5211	1-130-483-00	MYLAR	0.01MF	5%	50V
C5212	1-126-964-11	ELECT	10MF	20%	50V
C5213	1-126-960-11	ELECT	1MF	20%	50V
C5214	1-126-960-11	ELECT	1MF	20%	50V
C5215	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5216	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5217	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5218	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C5219	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5220	1-126-960-11	ELECT	1MF	20%	50V
C5221	1-126-960-11	ELECT	1MF	20%	50V
C5222	1-126-963-11	ELECT	4.7MF	20%	50V
C5223	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5224	1-126-960-11	ELECT	1MF	20%	50V
C5225	1-126-960-11	ELECT	1MF	20%	50V
C5226	1-126-963-11	ELECT	4.7MF	20%	50V
C5227	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5228	1-126-960-11	ELECT	1MF	20%	50V
C5229	1-126-960-11	ELECT	1MF	20%	50V
C5230	1-126-963-11	ELECT	4.7MF	20%	50V
C5231	1-126-963-11	ELECT	4.7MF	20%	50V
C5232	1-126-963-11	ELECT	4.7MF	20%	50V
C5233	1-126-963-11	ELECT	4.7MF	20%	50V
C5234	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5235	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5236	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5237	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5238	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5239	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5240	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C5241	1-104-664-11	ELECT	47MF	20%	25V
C5242	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5243	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5244	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5245	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5246	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5247	1-163-038-91	CERAMIC CHIP	0.1MF		25V
		<CONNECTOR>			
CN5001	1-691-423-11	CONNECTOR, BOARD TO BOARD 11P			
CN5002	*1-580-973-11	CONNECTOR, BOARD TO BOARD			
CN5003	1-691-423-11	CONNECTOR, BOARD TO BOARD 11P			
CN5004	*1-580-972-11	CONNECTOR, BOARD TO BOARD			
CN5005	1-691-423-11	CONNECTOR, BOARD TO BOARD 11P			
CN5006	*1-580-973-11	CONNECTOR, BOARD TO BOARD			
CN5007	1-691-423-11	CONNECTOR, BOARD TO BOARD 11P			
CN5008	*1-580-972-11	CONNECTOR, BOARD TO BOARD			
CN5009	1-691-423-11	CONNECTOR, BOARD TO BOARD 11P			
CN5010	*1-580-973-11	CONNECTOR, BOARD TO BOARD			
CN5011	1-691-423-11	CONNECTOR, BOARD TO BOARD 11P			
CN5012	*1-580-972-11	CONNECTOR, BOARD TO BOARD			
CN5013	1-691-423-11	CONNECTOR, BOARD TO BOARD 11P			
CN5014	*1-580-973-11	CONNECTOR, BOARD TO BOARD			
CN5015	1-691-423-11	CONNECTOR, BOARD TO BOARD 11P			

D

Rf.NO.	PART NO.	DESCRIPTION	REMARK
CN5016	1-691-423-11	CONNECTOR, BOARD TO BOARD 11P	
CN5017	*1-580-973-11	CONNECTOR, BOARD TO BOARD	
CN5018	1-691-423-11	CONNECTOR, BOARD TO BOARD 11P	
CN5019	1-691-423-11	CONNECTOR, BOARD TO BOARD 11P	
CN5020	*1-580-973-11	CONNECTOR, BOARD TO BOARD	
CN5021	1-691-423-11	CONNECTOR, BOARD TO BOARD 11P	
CN5022	1-691-423-11	CONNECTOR, BOARD TO BOARD 11P	
CN5023	*1-580-973-11	CONNECTOR, BOARD TO BOARD	
CN5024	1-691-423-11	CONNECTOR, BOARD TO BOARD 11P	
CN5025	1-691-423-11	CONNECTOR, BOARD TO BOARD 11P	
CN5026	*1-580-973-11	CONNECTOR, BOARD TO BOARD	
CN5027	1-691-423-11	CONNECTOR, BOARD TO BOARD 11P	
CN5028	1-691-423-11	CONNECTOR, BOARD TO BOARD 11P	
CN5029	*1-580-973-11	CONNECTOR, BOARD TO BOARD	
CN5030	1-691-423-11	CONNECTOR, BOARD TO BOARD 11P	
CN5037	*1-774-249-11	CONNECTOR, BOARD TO BOARD 10P	
CN5038	*1-774-249-11	CONNECTOR, BOARD TO BOARD 10P	
CN5039	*1-564-507-11	PLUG, CONNECTOR 4P	
CN5040	*1-564-507-11	PLUG, CONNECTOR 4P	
CN5041	*1-564-507-11	PLUG, CONNECTOR 4P	

<DIODE>

Rf.NO.	PART NO.	DESCRIPTION	REMARK
D5004	8-719-914-43	DIODE DAN202K	
D5005	8-719-914-43	DIODE DAN202K	
D5008	8-719-914-43	DIODE DAN202K	

<IC>

Rf.NO.	PART NO.	DESCRIPTION	REMARK
IC5001	8-759-083-85	IC LA7856A	
IC5002	8-759-251-31	IC CA0007AM	
IC5003	8-759-009-51	IC MC14538BF	
IC5004	8-759-381-53	IC uPC814G2-E2	
IC5005	8-752-072-94	IC CXA1875AM-T4	
IC5006	8-759-925-74	IC SN74HC04ANS	
IC5007	8-759-251-31	IC CA0007AM	
IC5008	8-759-251-31	IC CA0007AM	
IC5009	8-759-251-31	IC CA0007AM	
IC5010	8-759-251-31	IC CA0007AM	
IC5011	8-759-251-31	IC CA0007AM	
IC5012	8-759-925-80	IC SN74HC14ANS	
IC5013	8-759-926-98	IC SN74HC4040ANS	
IC5014	8-759-925-99	IC SN74HC109ANS-E05	
IC5015	8-759-926-17	IC SN74HC153ANS	
IC5016	8-759-926-21	IC SN74HC161ANS	
IC5017	8-759-926-24	IC SN74HC164ANS	
IC5018	8-752-379-93	IC CXD2018AQ-T6	
IC5019	8-759-925-90	IC SN74HC74ANS	
IC5020	8-759-381-53	IC uPC814G2-E2	
IC5021	8-759-518-90	IC MB88362PFV	
IC5022	8-759-927-46	IC SN74HC00ANS	
IC5023	8-759-381-53	IC uPC814G2-E2	
IC5024	8-759-925-90	IC SN74HC74ANS	
IC5025	8-759-927-46	IC SN74HC00ANS	
IC5026	8-759-926-21	IC SN74HC161ANS	
IC5027	8-759-908-15	IC TL431CLP	
IC5028	8-759-403-44	IC MN1280-S	
IC5029	8-759-041-45	IC DAC8840FS	
IC5030	8-759-926-21	IC SN74HC161ANS	
IC5031	8-759-381-53	IC uPC814G2-E2	
IC5032	8-759-926-21	IC SN74HC161ANS	
IC5033	8-759-327-51	IC PA0053B	
IC5034	8-759-327-51	IC PA0053B	
IC5035	8-759-381-53	IC uPC814G2-E2	
IC5036	8-759-926-24	IC SN74HC164ANS	
IC5037	8-759-381-53	IC uPC814G2-E2	
IC5038	8-759-009-51	IC MC14538BF	
IC5039	8-759-251-31	IC CA0007AM	
IC5040	8-759-381-53	IC uPC814G2-E2	
IC5042	8-759-381-53	IC uPC814G2-E2	
IC5044	8-759-251-31	IC CA0007AM	
IC5045	8-759-381-53	IC uPC814G2-E2	
IC5047	8-759-381-53	IC uPC814G2-E2	
IC5049	8-759-381-53	IC uPC814G2-E2	
IC5051	8-749-924-98	IC STK392-040	
IC5052	8-749-924-98	IC STK392-040	
IC5053	8-759-231-58	IC TA7812S	
	4-382-854-11	SCREW (M3X10), P, SW (+) ; IC5053	
IC5054	8-759-144-82	IC uPC2405HF	
	4-382-854-11	SCREW (M3X10), P, SW (+) ; IC5054	
IC5055	8-759-247-67	IC LM2990T-5.0	
	4-382-854-11	SCREW (M3X10), P, SW (+) ; IC5055	
IC5056	8-759-701-88	IC NJM7912FA	
	4-382-854-11	SCREW (M3X10), P, SW (+) ; IC5056	
IC5057	8-759-431-39	IC MAX8213BCSE-TE2	
IC5060	8-759-009-51	IC MC14538BF	
IC5061	8-759-381-53	IC uPC814G2-E2	
IC5062	8-759-009-51	IC MC14538BF	
IC5063	8-759-381-53	IC uPC814G2-E2	
IC5064	8-759-300-71	IC HD14053BFP	
IC5065	8-759-300-71	IC HD14053BFP	
IC5066	8-759-381-53	IC uPC814G2-E2	
IC5067	8-759-926-21	IC SN74HC161ANS	

<COIL>

Rf.NO.	PART NO.	DESCRIPTION	REMARK
L5001	1-410-470-11	INDUCTOR 10UH	
L5002	1-410-470-11	INDUCTOR 10UH	
L5003	1-408-397-00	INDUCTOR 1UH	
L5004	1-410-470-11	INDUCTOR 10UH	
L5005	1-410-470-11	INDUCTOR 10UH	
L5006	1-410-470-11	INDUCTOR 10UH	
L5007	1-410-470-11	INDUCTOR 10UH	
L5008	1-410-470-11	INDUCTOR 10UH	
L5009	1-410-470-11	INDUCTOR 10UH	
L5010	1-412-533-21	INDUCTOR 47UH	
L5011	1-412-533-21	INDUCTOR 47UH	
L5012	1-412-533-21	INDUCTOR 47UH	
L5013	1-412-533-21	INDUCTOR 47UH	
L5014	1-406-663-21	COIL, CHOKE 47UH	
L5015	1-406-663-21	COIL, CHOKE 47UH	
L5016	1-410-470-11	INDUCTOR 10UH	
L5017	1-410-470-11	INDUCTOR 10UH	
L5018	1-410-470-11	INDUCTOR 10UH	
L5019	1-410-470-11	INDUCTOR 10UH	

<TRANSISTOR>

Rf.NO.	PART NO.	DESCRIPTION	REMARK
Q5001	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q5002	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q5003	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	

Rf.NO.	PART NO.	DESCRIPTION	REMARK
Q5004	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q5005	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q5006	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q5015	8-729-903-10	TRANSISTOR FMW1	
Q5016	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q5017	8-729-026-57	TRANSISTOR FMS1A-T148	
Q5018	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q5019	8-729-903-10	TRANSISTOR FMW1	
Q5020	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q5021	8-729-026-57	TRANSISTOR FMS1A-T148	
Q5022	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q5023	8-729-903-10	TRANSISTOR FMW1	
Q5024	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q5025	8-729-026-57	TRANSISTOR FMS1A-T148	
Q5026	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q5027	8-729-903-10	TRANSISTOR FMW1	
Q5028	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q5029	8-729-026-57	TRANSISTOR FMS1A-T148	
Q5030	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q5032	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q5033	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5034	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q5035	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5036	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q5037	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5038	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q5039	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5040	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q5041	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q5042	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5043	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5044	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5045	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q5046	8-729-027-38	TRANSISTOR DTA144EKA-T146	
Q5047	1-801-806-11	TRANSISTOR DTC144EKA-T146	
	<RESISTOR>		
R5001	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R5002	1-216-075-00	METAL GLAZE 12K 5% 1/10W	
R5003	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R5004	1-216-663-11	METAL CHIP 3.3K 0.50% 1/10W	
R5005	1-216-675-11	METAL CHIP 10K 0.50% 1/10W	
R5006	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R5007	1-216-687-11	METAL CHIP 33K 0.50% 1/10W	
R5008	1-216-663-11	METAL CHIP 3.3K 0.50% 1/10W	
R5009	1-216-651-11	METAL CHIP 1K 0.50% 1/10W	
R5010	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R5011	1-216-075-00	METAL GLAZE 12K 5% 1/10W	
R5012	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R5013	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R5014	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R5015	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R5016	1-216-295-91	CONDUCTOR, CHIP	
R5017	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R5018	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W	
R5019	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R5020	1-216-071-00	METAL GLAZE 8.2K 5% 1/10W	
R5021	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R5022	1-216-667-11	METAL CHIP 4.7K 0.50% 1/10W	
R5023	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R5024	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R5025	1-216-687-11	METAL CHIP 33K 0.50% 1/10W	
R5027	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R5028	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R5029	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R5030	1-216-075-00	METAL GLAZE 12K 5% 1/10W	
R5031	1-216-077-00	METAL GLAZE 15K 5% 1/10W	
R5032	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R5033	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R5034	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R5035	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R5036	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R5037	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R5038	1-216-077-00	METAL GLAZE 15K 5% 1/10W	
R5039	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R5040	1-216-684-91	METAL CHIP 24K 0.50% 1/10W	
R5041	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R5042	1-216-045-00	METAL GLAZE 680 5% 1/10W	
R5043	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R5044	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R5046	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R5047	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R5048	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R5049	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R5050	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R5051	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R5052	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R5053	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R5054	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R5055	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R5056	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R5057	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R5058	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R5059	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R5060	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R5061	1-216-677-11	METAL CHIP 12K 0.50% 1/10W	
R5062	1-216-691-11	METAL CHIP 47K 0.50% 1/10W	
R5070	1-216-687-11	METAL CHIP 33K 0.50% 1/10W	
R5071	1-216-697-91	METAL CHIP 82K 0.50% 1/10W	
R5072	1-216-675-11	METAL CHIP 10K 0.50% 1/10W	
R5073	1-216-686-11	METAL CHIP 30K 0.50% 1/10W	
R5074	1-216-667-11	METAL CHIP 4.7K 0.50% 1/10W	
R5077	1-216-295-91	CONDUCTOR, CHIP	
R5078	1-216-295-91	CONDUCTOR, CHIP	
R5080	1-202-967-51	FUSIBLE 0.1 10% 1/6W	
R5081	1-202-967-51	FUSIBLE 0.1 10% 1/6W	
R5082	1-202-967-51	FUSIBLE 0.1 10% 1/6W	
R5083	1-202-967-51	FUSIBLE 0.1 10% 1/6W	
R5084	1-202-967-51	FUSIBLE 0.1 10% 1/6W	
R5085	1-202-967-51	FUSIBLE 0.1 10% 1/6W	
R5107	1-216-295-91	CONDUCTOR, CHIP	
R5108	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R5109	1-216-109-00	METAL GLAZE 330K 5% 1/10W	
R5110	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R5111	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R5112	1-216-295-91	CONDUCTOR, CHIP	
R5113	1-216-043-91	METAL GLAZE 560 5% 1/10W	

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Rf.NO.	PART NO.	DESCRIPTION			REMARK
R5115	1-216-091-00	METAL GLAZE	56K	5%	1/10W
R5116	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R5117	1-216-045-00	METAL GLAZE	680	5%	1/10W
R5118	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R5119	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R5120	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5121	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5122	1-216-673-11	METAL CHIP	8.2K	0.50%	1/10W
R5123	1-216-677-11	METAL CHIP	12K	0.50%	1/10W
R5124	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R5125	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R5126	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R5127	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5128	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5129	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R5130	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R5131	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R5132	1-216-295-91	CONDUCTOR, CHIP			
R5133	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R5134	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5135	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5136	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5137	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R5138	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R5148	1-216-033-00	METAL GLAZE	220	5%	1/10W
R5149	1-216-009-00	METAL GLAZE	22	5%	1/10W
R5150	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5151	1-216-697-91	METAL CHIP	82K	0.50%	1/10W
R5152	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5153	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R5154	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R5155	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R5156	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5157	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5158	1-216-091-00	METAL GLAZE	56K	5%	1/10W
R5159	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5160	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R5161	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5164	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R5166	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5167	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5168	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5169	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5170	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5171	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5172	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5173	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W
R5174	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R5175	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5176	1-216-043-91	METAL GLAZE	560	5%	1/10W
R5177	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5178	1-216-693-11	METAL CHIP	56K	0.50%	1/10W
R5179	1-216-679-11	METAL CHIP	15K	0.50%	1/10W
R5180	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5181	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R5182	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5185	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5186	1-216-043-91	METAL GLAZE	560	5%	1/10W
R5187	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5188	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5189	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5190	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5191	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5192	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5193	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5194	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W
R5195	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5196	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R5197	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R5198	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5199	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5200	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5201	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5202	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R5203	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5204	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5205	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5206	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5207	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R5208	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5209	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5210	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R5211	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5212	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5213	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R5214	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5215	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5216	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5217	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R5218	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5219	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R5220	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5221	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5222	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R5223	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5224	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R5225	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5226	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5227	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5228	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R5229	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5230	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R5231	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W
R5232	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R5233	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5234	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W
R5235	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R5236	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5237	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5238	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5239	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R5240	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5241	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R5242	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5243	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R5244	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5245	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5246	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5247	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5248	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W

Rf.NO.	PART NO.	DESCRIPTION			REMARK	
R5249	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R5250	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R5251	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R5252	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R5253	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R5254	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R5255	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R5256	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R5257	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R5258	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R5259	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R5260	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R5261	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	
R5262	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	
R5263	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	
R5264	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R5265	1-216-043-91	METAL GLAZE	560	5%	1/10W	
R5266	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	
R5267	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	
R5268	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	
R5269	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R5270	1-216-043-91	METAL GLAZE	560	5%	1/10W	
R5271	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	
R5272	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	
R5273	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	
R5274	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R5275	1-216-043-91	METAL GLAZE	560	5%	1/10W	
R5276	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	
R5277	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	
R5278	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	
R5279	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R5280	1-216-043-91	METAL GLAZE	560	5%	1/10W	
R5281	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	
R5282	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	
R5283	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	
R5284	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R5285	1-216-043-91	METAL GLAZE	560	5%	1/10W	
R5286	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	
R5287	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	
R5288	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	
R5289	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R5290	1-216-043-91	METAL GLAZE	560	5%	1/10W	
R5291	1-216-295-91	CONDUCTOR, CHIP				
R5292	1-216-295-91	CONDUCTOR, CHIP				
R5293	1-216-295-91	CONDUCTOR, CHIP				
R5294	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R5295	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R5296	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R5297	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R5298	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R5299	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R5300	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R5301	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R5302	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R5303	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R5304	1-215-857-11	METAL OXIDE	10	5%	1W	F
R5305	1-215-857-11	METAL OXIDE	10	5%	1W	F
R5306	1-216-451-11	METAL OXIDE	120	5%	2W	F
R5307	1-216-451-11	METAL OXIDE	120	5%	2W	F
R5308	1-216-451-11	METAL OXIDE	120	5%	2W	F
R5309	1-216-295-91	CONDUCTOR, CHIP				
R5310	1-216-295-91	CONDUCTOR, CHIP				
R5311	1-216-295-91	CONDUCTOR, CHIP				
R5312	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R5313	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R5314	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R5315	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R5316	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R5317	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R5318	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R5319	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R5320	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R5321	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R5322	1-215-857-11	METAL OXIDE	10	5%	1W	F
R5323	1-215-857-11	METAL OXIDE	10	5%	1W	F
R5324	1-216-451-11	METAL OXIDE	120	5%	2W	F
R5325	1-216-451-11	METAL OXIDE	120	5%	2W	F
R5326	1-216-451-11	METAL OXIDE	120	5%	2W	F
R5333	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R5334	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R5335	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R5336	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R5337	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R5338	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R5339	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R5340	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R5341	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R5342	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R5343	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R5344	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R5345	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R5346	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R5347	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R5348	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R5349	1-216-091-00	METAL GLAZE	56K	5%	1/10W	
R5350	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W	
R5351	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R5352	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R5353	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R5354	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R5355	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R5356	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R5357	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R5358	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R5359	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R5360	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R5361	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	
R5362	1-216-079-00	METAL GLAZE	18K	5%	1/10W	
R5363	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R5380	1-216-682-11	METAL CHIP	20K	0.50%	1/10W	
R5381	1-216-675-11	METAL CHIP	10K	0.50%	1/10W	
R5382	1-216-689-11	METAL CHIP	39K	0.50%	1/10W	
R5383	1-216-675-11	METAL CHIP	10K	0.50%	1/10W	
R5384	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R5385	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R5386	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R5387	1-216-675-11	METAL CHIP	10K	0.50%	1/10W	
R5388	1-216-675-11	METAL CHIP	10K	0.50%	1/10W	
R5389	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R5390	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	

D D1R

Rf.NO.	PART NO.	DESCRIPTION	REMARK
R5391	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R5392	1-216-085-00	METAL GLAZE 33K 5% 1/10W	
R5393	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R5394	1-216-675-11	METAL CHIP 10K 0.50% 1/10W	
R5395	1-216-687-11	METAL CHIP 33K 0.50% 1/10W	
R5396	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R5397	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R5398	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R5399	1-216-085-00	METAL GLAZE 33K 5% 1/10W	
R5400	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R5401	1-216-675-11	METAL CHIP 10K 0.50% 1/10W	
R5402	1-216-687-11	METAL CHIP 33K 0.50% 1/10W	
R5403	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R5404	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R5405	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R5406	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R5407	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W	
R5408	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R5414	1-216-681-11	METAL CHIP 18K 0.50% 1/10W	
R5415	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R5416	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R5417	1-216-085-00	METAL GLAZE 33K 5% 1/10W	
R5418	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R5419	1-216-073-00	METAL GLAZE 10K 5% 1/10W	

<VARIABLE RESISTOR>

Rf.NO.	PART NO.	DESCRIPTION	REMARK
RV5001	1-241-765-11	RES, ADJ, CERMET 22K	
RV5002	1-241-763-11	RES, ADJ, CERMET 4.7K	
RV5003	1-241-765-11	RES, ADJ, CERMET 22K	

<TEST PIN>

Rf.NO.	PART NO.	DESCRIPTION	REMARK
TP5001	1-535-757-11	CHIP, CHECKER	
TP5002	1-535-757-11	CHIP, CHECKER	
TP5003	1-535-757-11	CHIP, CHECKER	
TP5004	1-535-757-11	CHIP, CHECKER	
TP5005	1-535-757-11	CHIP, CHECKER	
TP5006	1-535-757-11	CHIP, CHECKER	
TP5007	1-535-757-11	CHIP, CHECKER	
TP5008	1-535-757-11	CHIP, CHECKER	
TP5009	1-535-757-11	CHIP, CHECKER	
TP5010	1-535-757-11	CHIP, CHECKER	
TP5011	1-535-757-11	CHIP, CHECKER	
TP5012	1-535-757-11	CHIP, CHECKER	
TP5013	1-535-757-11	CHIP, CHECKER	
TP5014	1-535-757-11	CHIP, CHECKER	
TP5015	1-535-757-11	CHIP, CHECKER	
TP5016	1-535-757-11	CHIP, CHECKER	
TP5017	1-535-757-11	CHIP, CHECKER	
TP5018	1-535-757-11	CHIP, CHECKER	
TP5019	1-535-757-11	CHIP, CHECKER	
TP5020	1-535-757-11	CHIP, CHECKER	
TP5021	1-535-757-11	CHIP, CHECKER	
TP5022	1-535-757-11	CHIP, CHECKER	
TP5023	1-535-757-11	CHIP, CHECKER	
TP5024	1-535-757-11	CHIP, CHECKER	
TP5025	1-535-757-11	CHIP, CHECKER	
TP5026	1-535-757-11	CHIP, CHECKER	
TP5027	1-535-757-11	CHIP, CHECKER	
TP5028	1-535-757-11	CHIP, CHECKER	
TP5029	1-535-757-11	CHIP, CHECKER	
TP5030	1-535-757-11	CHIP, CHECKER	
TP5031	1-535-757-11	CHIP, CHECKER	
TP5032	1-535-757-11	CHIP, CHECKER	
TP5033	1-535-757-11	CHIP, CHECKER	
TP5034	1-535-757-11	CHIP, CHECKER	
TP5035	1-535-757-11	CHIP, CHECKER	
TP5036	1-535-757-11	CHIP, CHECKER	
TP5037	1-535-757-11	CHIP, CHECKER	
TP5038	1-535-757-11	CHIP, CHECKER	
TP5039	1-535-757-11	CHIP, CHECKER	
TP5040	1-535-757-11	CHIP, CHECKER	
TP5041	1-535-757-11	CHIP, CHECKER	
TP5042	1-535-757-11	CHIP, CHECKER	
TP5043	1-535-757-11	CHIP, CHECKER	
TP5044	1-535-757-11	CHIP, CHECKER	
TP5045	1-535-757-11	CHIP, CHECKER	
TP5046	1-535-757-11	CHIP, CHECKER	
TP5047	1-535-757-11	CHIP, CHECKER	
TP5048	1-535-757-11	CHIP, CHECKER	
TP5049	1-535-757-11	CHIP, CHECKER	
TP5050	1-535-757-11	CHIP, CHECKER	
TP5051	1-535-757-11	CHIP, CHECKER	
TP5052	1-535-757-11	CHIP, CHECKER	
TP5053	1-535-757-11	CHIP, CHECKER	
TP5054	1-535-757-11	CHIP, CHECKER	

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* A-1343-234-A D1R BOARD, COMPLETE

<CAPACITOR>

Rf.NO.	PART NO.	DESCRIPTION	REMARK
C5600	1-163-038-91	CERAMIC CHIP 0.1MF 25V	
C5601	1-163-038-91	CERAMIC CHIP 0.1MF 25V	
C5602	1-126-157-11	ELECT 10MF 20% 16V	
C5603	1-126-157-11	ELECT 10MF 20% 16V	
C5616	1-163-038-91	CERAMIC CHIP 0.1MF 25V	
C5617	1-163-038-91	CERAMIC CHIP 0.1MF 25V	
C5618	1-163-038-91	CERAMIC CHIP 0.1MF 25V	
C5619	1-163-038-91	CERAMIC CHIP 0.1MF 25V	

<CONNECTOR>

Rf.NO.	PART NO.	DESCRIPTION	REMARK
CN5600	1-691-424-11	CONNECTOR, BOARD TO BOARD 11P	
CN5601	* 1-580-976-11	CONNECTOR, BOARD TO BOARD	
CN5602	1-691-424-11	CONNECTOR, BOARD TO BOARD 11P	
CN5603	* 1-580-975-11	CONNECTOR, BOARD TO BOARD	

<DIODE>

Rf.NO.	PART NO.	DESCRIPTION	REMARK
D5600	8-719-914-43	DIODE DAN202K	

<IC>

Rf.NO.	PART NO.	DESCRIPTION	REMARK
IC5600	8-759-464-79	IC PM0011AS	
IC5603	8-759-381-53	IC uPC814G2-E2	
IC5604	8-759-381-53	IC uPC814G2-E2	

<RESISTOR>

Rf.NO.	PART NO.	DESCRIPTION			REMARK
R5600	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5601	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5602	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5603	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5604	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5605	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R5606	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5607	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5608	1-216-658-11	METAL CHIP	2K	0.50%	1/10W
R5609	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5610	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5611	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5612	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5613	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5614	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R5615	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R5616	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R5617	1-216-682-11	METAL CHIP	20K	0.50%	1/10W
R5618	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R5619	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R5620	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R5621	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5622	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5623	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5624	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5625	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5628	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5629	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R5630	1-216-687-11	METAL CHIP	33K	0.50%	1/10W
R5633	1-216-691-11	METAL CHIP	47K	0.50%	1/10W
R5634	1-216-696-11	METAL CHIP	75K	0.50%	1/10W
R5635	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R5636	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R5713	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R5714	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R5727	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5728	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5729	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R5730	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5731	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5732	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R5733	1-216-295-91	CONDUCTOR, CHIP			
R5735	1-216-295-91	CONDUCTOR, CHIP			
R5737	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5738	1-216-651-11	METAL CHIP	1K	0.50%	1/10W

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* A-1343-235-A D2 BOARD, COMPLETE

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<CAPACITOR>

Rf.NO.	PART NO.	DESCRIPTION			REMARK
C5750	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5751	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5752	1-126-157-11	ELECT	10MF	20%	16V
C5753	1-126-157-11	ELECT	10MF	20%	16V
C5754	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5755	1-163-038-91	CERAMIC CHIP	0.1MF		25V

<CONNECTOR>

Rf.NO.	PART NO.	DESCRIPTION	REMARK
CN5750	1-691-424-11	CONNECTOR, BOARD TO BOARD 11P	
CN5751	*1-580-976-11	CONNECTOR, BOARD TO BOARD	
CN5752	1-691-424-11	CONNECTOR, BOARD TO BOARD 11P	

<IC>

Rf.NO.	PART NO.	DESCRIPTION	REMARK
IC5750	8-759-464-79	IC PM0011AS	
IC5751	8-759-381-53	IC uPC814G2-E2	

<RESISTOR>

Rf.NO.	PART NO.	DESCRIPTION			REMARK
R5750	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5751	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5752	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5753	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5754	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5755	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5756	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5757	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5758	1-216-658-11	METAL CHIP	2K	0.50%	1/10W
R5759	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5760	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5761	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5762	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5763	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5764	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5765	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R5766	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R5767	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R5768	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R5769	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R5770	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R5771	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5772	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5773	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5774	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5775	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5776	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5777	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5778	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R5779	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5780	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5781	1-216-651-11	METAL CHIP	1K	0.50%	1/10W

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* A-1343-236-A D3 BOARD, COMPLETE

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<CONNECTOR>

Rf.NO.	PART NO.	DESCRIPTION	REMARK
CN5800	*1-774-246-11	CONNECTOR, BOARD TO BOARD 10P	

<RESISTOR>

Rf.NO.	PART NO.	DESCRIPTION			REMARK
R5800	1-214-808-11	METAL	4.7	1%	1/2W
R5801	1-214-808-11	METAL	4.7	1%	1/2W
R5802	1-214-808-11	METAL	4.7	1%	1/2W
R5803	1-214-808-11	METAL	4.7	1%	1/2W
R5804	1-214-808-11	METAL	4.7	1%	1/2W

Rf.NO.	PART NO.	DESCRIPTION			REMARK
R5805	1-214-808-11	METAL	4.7	1%	1/2W
R5806	1-214-808-11	METAL	4.7	1%	1/2W
R5807	1-214-808-11	METAL	4.7	1%	1/2W
R5808	1-214-808-11	METAL	4.7	1%	1/2W
R5809	1-214-808-11	METAL	4.7	1%	1/2W
R5810	1-214-808-11	METAL	4.7	1%	1/2W
R5811	1-214-808-11	METAL	4.7	1%	1/2W
R5812	1-214-808-11	METAL	4.7	1%	1/2W
R5813	1-214-808-11	METAL	4.7	1%	1/2W
R5814	1-214-808-11	METAL	4.7	1%	1/2W
R5815	1-214-808-11	METAL	4.7	1%	1/2W
R5816	1-214-808-11	METAL	4.7	1%	1/2W
R5817	1-214-808-11	METAL	4.7	1%	1/2W

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* A-1343-252-A D1G BOARD, COMPLETE

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<CAPACITOR>

C5604	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5605	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5606	1-126-157-11	ELECT	10MF	20%	16V
C5607	1-126-157-11	ELECT	10MF	20%	16V
C5620	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5621	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5622	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5623	1-163-038-91	CERAMIC CHIP	0.1MF		25V

<CONNECTOR>

CN5604	1-691-424-11	CONNECTOR, BOARD TO BOARD 11P
CN5605	* 1-580-976-11	CONNECTOR, BOARD TO BOARD
CN5606	1-691-424-11	CONNECTOR, BOARD TO BOARD 11P
CN5607	* 1-580-975-11	CONNECTOR, BOARD TO BOARD

<IC>

IC5601	8-759-464-79	IC PM0011AS
IC5605	8-759-381-53	IC uPC814G2-E2
IC5606	8-759-381-53	IC uPC814G2-E2

<RESISTOR>

R5637	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5638	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5639	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5640	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5641	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5642	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R5643	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5644	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5645	1-216-658-11	METAL CHIP	2K	0.50%	1/10W
R5646	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5647	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5648	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5649	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5650	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5651	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R5652	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R5653	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R5654	1-216-682-11	METAL CHIP	20K	0.50%	1/10W
R5655	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R5656	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R5657	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R5658	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5659	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5660	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5661	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5662	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5665	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5670	1-216-691-11	METAL CHIP	47K	0.50%	1/10W
R5671	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R5672	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R5673	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5739	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5740	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R5741	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5742	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5743	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R5744	1-216-295-91	CONDUCTOR, CHIP			
R5746	1-216-295-91	CONDUCTOR, CHIP			
R5748	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5749	1-216-651-11	METAL CHIP	1K	0.50%	1/10W

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* A-1343-253-A D1B BOARD, COMPLETE

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<CAPACITOR>

C5608	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5609	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5610	1-126-157-11	ELECT	10MF	20%	16V
C5611	1-126-157-11	ELECT	10MF	20%	16V
C5612	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5613	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5614	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5615	1-163-038-91	CERAMIC CHIP	0.1MF		25V

<CONNECTOR>

CN5608	1-691-424-11	CONNECTOR, BOARD TO BOARD 11P
CN5609	* 1-580-976-11	CONNECTOR, BOARD TO BOARD
CN5610	1-691-424-11	CONNECTOR, BOARD TO BOARD 11P
CN5611	* 1-580-975-11	CONNECTOR, BOARD TO BOARD

<DIODE>

D5602	8-719-914-43	DIODE DAN202K

<IC>

IC5602	8-759-464-79	IC PM0011AS
IC5607	8-759-381-53	IC uPC814G2-E2
IC5608	8-759-381-53	IC uPC814G2-E2

<RESISTOR>

R5674	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5675	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5676	1-216-025-91	METAL GLAZE	100	5%	1/10W

Rf.NO.	PART NO.	DESCRIPTION			REMARK
R5677	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5678	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5679	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R5680	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5681	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5682	1-216-658-11	METAL CHIP	2K	0.50%	1/10W
R5683	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5684	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5685	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5686	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5687	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5688	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R5689	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R5690	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R5691	1-216-682-11	METAL CHIP	20K	0.50%	1/10W
R5692	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R5693	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R5694	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R5695	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5696	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5697	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5698	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5699	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5702	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5703	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R5704	1-216-687-11	METAL CHIP	33K	0.50%	1/10W
R5707	1-216-691-11	METAL CHIP	47K	0.50%	1/10W
R5708	1-216-696-11	METAL CHIP	75K	0.50%	1/10W
R5709	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R5710	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R5711	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R5712	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R5715	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R5716	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5717	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5718	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R5719	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5720	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5721	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R5722	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5723	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5724	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R5725	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R5726	1-216-675-11	METAL CHIP	10K	0.50%	1/10W

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⚠A-1480-198-A DY (R) ASSY (ZR BOARD)

⚠1-451-442-11 DEFLECTION YOKE

<CONNECTOR>

Rf.NO.	PART NO.	DESCRIPTION
CN8104	*1-564-519-11	PLUG, CONNECTOR 4P
CN8106	*1-564-518-11	PLUG, CONNECTOR 3P
CN8107	*1-580-690-11	PIN, CONNECTOR (PC BOARD) 2P

<RESISTOR>

Rf.NO.	PART NO.	DESCRIPTION			REMARK
R8110	1-249-414-11	CARBON	560	5%	1/4W
R8114	1-249-414-11	CARBON	560	5%	1/4W

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⚠A-1480-196-A DY (G) ASSY (ZG BOARD)

⚠1-451-442-11 DEFLECTION YOKE

<CONNECTOR>

Rf.NO.	PART NO.	DESCRIPTION
CN8203	*1-564-519-11	PLUG, CONNECTOR 4P
CN8204	*1-564-506-11	PLUG, CONNECTOR 3P
CN8205	*1-564-518-11	PLUG, CONNECTOR 3P
CN8206	*1-580-690-11	PIN, CONNECTOR (PC BOARD) 2P

<RESISTOR>

Rf.NO.	PART NO.	DESCRIPTION			REMARK
R8209	1-249-414-11	CARBON	560	5%	1/4W
R8211	1-249-414-11	CARBON	560	5%	1/4W

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⚠A-1480-196-A DY (B) ASSY (ZB BOARD)

⚠1-451-442-11 DEFLECTION YOKE

<CONNECTOR>

Rf.NO.	PART NO.	DESCRIPTION
CN8302	*1-564-519-11	PLUG, CONNECTOR 4P
CN8303	*1-564-518-11	PLUG, CONNECTOR 3P
CN8304	*1-580-690-11	PIN, CONNECTOR (PC BOARD) 2P
CN8305	*1-564-518-11	PLUG, CONNECTOR 3P

<RESISTOR>

Rf.NO.	PART NO.	DESCRIPTION			REMARK
R8309	1-249-414-11	CARBON	560	5%	1/4W
R8311	1-249-414-11	CARBON	560	5%	1/4W

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MISCELLANEOUS

PART NO.	DESCRIPTION
⚠1-225-401-11	RES ASSY, HIGH-VOLTAGE
⚠1-451-442-11	DEFLECTION YOKE
⚠1-452-790-21	NECK ASSY (NA-295)
⚠1-453-108-11	DC BLOCK, HIGH-VOLTAGE
⚠1-526-813-12	INLET, AC (3P)
1-543-653-11	CORE ASSY, BEAD(DIVISION TYPE)
1-543-827-11	CLAMP, SLEEVE FERRITE
1-698-046-11	FAN, DC
1-698-641-11	FAN, DC
1-698-854-11	FAN, DC
⚠A-1480-196-A	DY (B) ASSY
⚠A-1480-197-A	DY (G) ASSY
⚠A-1480-198-A	DY (R) ASSY
⚠8-733-509-05	CRT 07MAC2(G)(GC LENS)
⚠8-733-511-05	CRT 07MAC2(B)(I)
⚠8-733-515-05	CRT 07MAC2(R) (LC)
8-742-020-00	IC SBX1610-09

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BA

Rf.NO.	PART NO.	DESCRIPTION	REMARK
		ACCESSORIES	
	⚠1-557-377-11	CORD, POWER (3 CORE) (RVP-411D/411DS/511DS, CHP-411D)	
	1-575-100-21	CABLE, MINIATURE PLUG	
	⚠1-590-910-11	CORD, ROWER (RVP-411DM/411DMS/511DMS,CHP-411DM)	
	3-701-810-81	SCREW, TERMINAL (CHP-411/411DM)	
	3-810-869-15	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH)	
	3-810-869-25	MANUAL, INSTRUCTION (GERMAN, ITALIAN) (RVP-411DM/411DMS/511DMS/511DS, CHP-411DM)	
	3-861-281-01	MANUAL, INSTRUCTION (JAPANESE, ENGLISH, FRENCH, SPANISH, GERMAN, ITALIAN) (VPS-411RF/511RF)	
	* 4-041-927-31	BAG, POLYETHYLENE (CHP-411/411DM)	
	* 4-052-736-01	BRACKET, CHASSIS (CHP-411/411DM)	
	* 4-053-017-01	BOARD, TOP (RVP-411D/411DM/411DS/411DMS)	
	* 4-053-018-01	TRAY (RVP-411D/411DM)	
	* 4-053-020-01	INDIVIDUAL CARTON (RVP-411D)	
	* 4-053-021-01	TRAY (RVP-411D/411DM/411DS/411DMS)	
	* 4-053-110-01	CUSHION (UPPER) (ASSY) (RVP-411D/411DM/411DS/411DMS/511DS/511DMS)	
	* 4-053-111-01	CUSHION (LOWER) (ASSY) (RVP-411D/411DM/411DS/411DMS/511DS/511DMS)	
	* 4-053-595-01	INDIVIDUAL CARTON (RVP-411DM)	
	* 4-054-200-01	INDIVIDUAL CARTON (CHP-411D)	
	* 4-054-233-01	INDIVIDUAL CARTON (CHP-411DM)	
	* 4-060-065-01	CUTION (LOWER) (ASSY) (CHP-411/411DM)	
	* 4-061-902-01	INDIVIDUAL CARTON (RVP-411DS)	
	* 4-061-903-01	INDIVIDUAL CARTON (RVP-411DMS)	
	* 4-061-904-01	INDIVIDUAL CARTON (RVP-511DS)	
	* 4-061-906-01	TRAY (RVP-511DS/511DMS)	
	* 4-061-907-01	INDIVIDUAL CARTON (RVP-511DMS)	
	* 4-062-565-01	SHEET, PROTECTION (RVP-511DS/511DMS)	
	* 4-342-940-00	SHEET, PROTECTION (RVP-411D/411DM/411DS/411DMS)	
	* 4-396-077-01	JOINT (RVP-411D/411DM/411DS/411DMS/511DS/511DMS)	

PWB-411D

Rf.NO.	PART NO.	DESCRIPTION			REMARK
	* A-1135-872-A	BA BOARD, COMPLETE			
	1-562-579-21	RECEPTACLE, CONNECTOR 2P			
		<CAPACITOR>			
C3001	1-126-204-11	ELECT	47MF	20%	16V
C3002	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C3003	1-126-395-11	ELECT	22MF	20%	16V
C3004	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3005	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3006	1-126-204-11	ELECT	47MF	20%	16V
C3007	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C3008	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C3017	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3018	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3019	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3020	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3021	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3022	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3023	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3024	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3025	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3026	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3027	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3028	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3029	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3030	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3031	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3032	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3033	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3034	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3035	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3036	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3037	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3038	1-126-204-11	ELECT	47MF	20%	16V
C3039	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3040	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3041	1-163-222-11	CERAMIC CHIP	5PF	0.25PF	50V
C3042	1-126-395-11	ELECT	22MF	20%	16V
C3043	1-126-204-11	ELECT	47MF	20%	16V
C3044	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3045	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3046	1-163-222-11	CERAMIC CHIP	5PF	0.25PF	50V
C3047	1-126-395-11	ELECT	22MF	20%	16V
C3048	1-126-204-11	ELECT	47MF	20%	16V
C3049	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3050	1-126-204-11	ELECT	47MF	20%	16V
C3051	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3052	1-126-204-11	ELECT	47MF	20%	16V
C3053	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3054	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3055	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3056	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3057	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3058	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3059	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3060	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3061	1-128-004-11	ELECT CHIP	10MF	20%	16V

Rf.NO.	PART NO.	DESCRIPTION			REMARK
C3062	1-128-006-11	ELECT CHIP	4.7MF	20%	25V
C3063	1-128-006-11	ELECT CHIP	4.7MF	20%	25V
C3064	1-128-006-11	ELECT CHIP	4.7MF	20%	25V
C3065	1-128-006-11	ELECT CHIP	4.7MF	20%	25V
C3066	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3067	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3068	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3069	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3070	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3071	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3072	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3073	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3074	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3075	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3076	1-126-204-11	ELECT	47MF	20%	16V
C3077	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3078	1-126-204-11	ELECT	47MF	20%	16V
C3079	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3080	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3081	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3082	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3083	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3084	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3085	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3086	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3087	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3090	1-128-012-11	ELECT CHIP	0.47MF	20%	50V
C3091	1-164-182-11	CERAMIC CHIP	0.0033MF	10%	50V
C3092	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3093	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3094	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3095	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C3096	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C3097	1-163-099-00	CERAMIC CHIP	18PF	5%	50V
C3098	1-163-099-00	CERAMIC CHIP	18PF	5%	50V
C3099	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3101	1-126-395-11	ELECT	22MF	20%	16V
C3102	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3103	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3104	1-128-357-11	ELECT CHIP	10MF	20%	16V
C3105	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C3106	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3107	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3108	1-128-357-11	ELECT CHIP	10MF	20%	16V
C3109	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C3110	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3111	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3112	1-126-204-11	ELECT	47MF	20%	16V
C3113	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C3114	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3115	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3116	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C3117	1-128-013-11	ELECT CHIP	1MF	20%	50V
C3118	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C3119	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C3120	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C3121	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3122	1-163-091-00	CERAMIC CHIP	8PF	0.25PF	50V
C3124	1-163-091-00	CERAMIC CHIP	8PF	0.25PF	50V

Rf.NO.	PART NO.	DESCRIPTION			REMARK
C3126	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3127	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C3128	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3129	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3130	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C3131	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3132	1-126-204-11	ELECT	47MF	20%	16V
C3133	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3201	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3202	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3203	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3204	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3205	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3206	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3207	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3208	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3209	1-128-009-11	ELECT CHIP	0.1MF	20%	50V
C3210	1-128-009-11	ELECT CHIP	0.1MF	20%	50V
C3211	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3212	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3213	1-126-204-11	ELECT	47MF	20%	16V
C3214	1-126-204-11	ELECT	47MF	20%	16V
C3215	1-126-204-11	ELECT	47MF	20%	16V
C3216	1-126-204-11	ELECT	47MF	20%	16V
C3217	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3218	1-126-204-11	ELECT	47MF	20%	16V
C3219	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3220	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3221	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3222	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3223	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3224	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3225	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3226	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3227	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3228	1-126-395-11	ELECT	22MF	20%	16V
C3229	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C3230	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3232	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3233	1-126-204-11	ELECT	47MF	20%	16V
C3234	1-128-012-11	ELECT CHIP	0.47MF	20%	50V
C3235	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3236	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3237	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3238	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3239	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3240	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3241	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3242	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3243	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3244	1-126-204-11	ELECT	47MF	20%	16V
C3245	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3246	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3247	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3248	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3249	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3250	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3251	1-126-204-11	ELECT	47MF	20%	16V
C3252	1-163-241-11	CERAMIC CHIP	39PF	5%	50V

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Rf.NO.	PART NO.	DESCRIPTION			REMARK
C3253	1-163-241-11	CERAMIC CHIP	39PF	5%	50V
C3254	1-126-204-11	ELECT	47MF	20%	16V
C3255	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3401	1-163-245-11	CERAMIC CHIP	56PF	5%	50V
C3402	1-128-357-11	ELECT CHIP	10MF	20%	16V
C3403	1-126-204-11	ELECT	47MF	20%	16V
C3404	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3405	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3406	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3407	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3408	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3409	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3410	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3411	1-163-245-11	CERAMIC CHIP	56PF	5%	50V
C3412	1-128-357-11	ELECT CHIP	10MF	20%	16V
C3413	1-126-204-11	ELECT	47MF	20%	16V
C3414	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3415	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3416	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3417	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3418	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3419	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3420	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3421	1-163-245-11	CERAMIC CHIP	56PF	5%	50V
C3422	1-128-357-11	ELECT CHIP	10MF	20%	16V
C3423	1-126-204-11	ELECT	47MF	20%	16V
C3424	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3425	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3426	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3427	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3428	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3429	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3430	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3431	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3432	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3433	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3434	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3435	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3436	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3437	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3438	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3439	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3440	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3441	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3442	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3443	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3444	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3445	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3446	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3447	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3448	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3449	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3450	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3451	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3452	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3453	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3454	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3455	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3456	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3457	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3458	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3459	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3460	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3461	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3462	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3463	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3464	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3465	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3466	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3467	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3468	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3469	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3470	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3471	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3472	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3473	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3474	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3475	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3476	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3477	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3478	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3479	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3480	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3481	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3482	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3483	1-126-204-11	ELECT	47MF	20%	16V
C3484	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3485	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3486	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C3488	1-126-204-11	ELECT	47MF	20%	16V
C3489	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3490	1-126-204-11	ELECT	47MF	20%	16V
C3491	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C3493	1-126-204-11	ELECT	47MF	20%	16V
C3494	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3495	1-126-204-11	ELECT	47MF	20%	16V
C3496	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C3498	1-126-204-11	ELECT	47MF	20%	16V
C3499	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3500	1-126-204-11	ELECT	47MF	20%	16V
C3501	1-126-204-11	ELECT	47MF	20%	16V
C3502	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3503	1-126-204-11	ELECT	47MF	20%	16V
C3504	1-126-204-11	ELECT	47MF	20%	16V
C3505	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3506	1-126-204-11	ELECT	47MF	20%	16V
C3507	1-126-204-11	ELECT	47MF	20%	16V
C3508	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3509	1-126-204-11	ELECT	47MF	20%	16V
C3510	1-126-204-11	ELECT	47MF	20%	16V
C3511	1-126-204-11	ELECT	47MF	20%	16V
C3512	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3513	1-126-204-11	ELECT	47MF	20%	16V
C3514	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3515	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3516	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3517	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3518	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3519	1-163-038-91	CERAMIC CHIP	0.1MF		25V

Rf.NO.	PART NO.	DESCRIPTION			REMARK
C3520	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3521	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3522	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3523	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3524	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3525	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3526	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3527	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3528	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3529	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3530	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3531	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C3532	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3533	1-163-014-00	CERAMIC CHIP	0.0027MF	10%	50V
C3534	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3535	1-163-127-00	CERAMIC CHIP	270PF	5%	50V
C3536	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3537	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3538	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C3539	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3540	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3541	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C3542	1-126-601-11	ELECT	2.2MF	20%	50V
C3543	1-126-601-11	ELECT	2.2MF	20%	50V
C3544	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3545	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C3546	1-163-119-11	CERAMIC CHIP	120PF	5%	50V
C3547	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C3548	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C3549	1-126-204-11	ELECT	47MF	20%	16V
C3550	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C3551	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3552	1-126-204-11	ELECT	47MF	20%	16V
C3553	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3554	1-126-204-11	ELECT	47MF	20%	16V
C3555	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3556	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3557	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3559	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3560	1-163-127-00	CERAMIC CHIP	270PF	5%	50V
C3561	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3562	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3563	1-164-343-11	CERAMIC CHIP	0.056MF	10%	25V
C3564	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3565	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3566	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C3567	1-126-601-11	ELECT	2.2MF	20%	50V
C3568	1-126-601-11	ELECT	2.2MF	20%	50V
C3569	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3570	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C3571	1-163-119-11	CERAMIC CHIP	120PF	5%	50V
C3572	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C3573	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C3574	1-126-204-11	ELECT	47MF	20%	16V
C3575	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3576	1-126-204-11	ELECT	47MF	20%	16V
C3577	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3578	1-126-204-11	ELECT	47MF	20%	16V
C3579	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3580	1-163-038-91	CERAMIC CHIP	0.1MF		25V

Rf.NO.	PART NO.	DESCRIPTION			REMARK
C3581	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C3582	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3583	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3584	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C3585	1-164-005-11	CERAMIC CHIP	0.47MF		16V
C3586	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3587	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3588	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3589	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3590	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3601	1-126-601-11	ELECT	2.2MF	20%	50V
C3602	1-128-013-11	ELECT CHIP	1MF	20%	50V
C3603	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3604	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3605	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3606	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3607	1-128-013-11	ELECT CHIP	1MF	20%	50V
C3608	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3609	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3610	1-164-182-11	CERAMIC CHIP	0.0033MF	10%	50V
C3611	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3612	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3613	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3614	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3615	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3616	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3617	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3618	1-128-013-11	ELECT CHIP	1MF	20%	50V
C3619	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3620	1-164-182-11	CERAMIC CHIP	0.0033MF	10%	50V
C3621	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3622	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3623	1-126-204-11	ELECT	47MF	20%	16V
C3624	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3625	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3626	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3627	1-128-004-11	ELECT CHIP	10MF	20%	16V
C3628	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3629	1-163-275-00	CERAMIC CHIP	0.001MF	5%	50V
C3630	1-164-182-11	CERAMIC CHIP	0.0033MF	10%	50V
C3631	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3632	1-164-695-11	CERAMIC CHIP	0.0022MF	5%	50V
C3633	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C3634	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C3635	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C3636	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3637	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C3638	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C3639	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
	<TRIMMER>				
CV3001	1-141-227-00	TRIMMER, CERAMIC	20PF		
CV3002	1-141-227-00	TRIMMER, CERAMIC	20PF		
	<DIODE>				
D3001	8-719-106-53	DIODE	RD10M-B2		
D3002	8-719-106-53	DIODE	RD10M-B2		
D3003	8-719-106-53	DIODE	RD10M-B2		

BA

Rf.NO.	PART NO.	DESCRIPTION	REMARK
D3004	8-719-106-53	DIODE RD10M-B2	
D3005	8-719-914-43	DIODE DAN202K	
D3201	8-719-106-53	DIODE RD10M-B2	
D3202	8-719-106-53	DIODE RD10M-B2	
D3203	8-719-106-53	DIODE RD10M-B2	
D3204	8-719-914-43	DIODE DAN202K	
D3401	8-719-053-40	DIODE SC016-2-TE12RA	
D3402	8-719-053-40	DIODE SC016-2-TE12RA	
D3403	8-719-053-40	DIODE SC016-2-TE12RA	
D3404	8-719-053-40	DIODE SC016-2-TE12RA	
D3405	8-719-053-40	DIODE SC016-2-TE12RA	
D3406	8-719-053-40	DIODE SC016-2-TE12RA	
D3407	8-719-002-81	DIODE 1T363	
D3408	8-719-002-81	DIODE 1T363	
D3409	8-719-053-40	DIODE SC016-2-TE12RA	
D3410	8-719-053-40	DIODE SC016-2-TE12RA	
D3411	8-719-914-43	DIODE DAN202K	
D3412	8-719-105-38	DIODE RD3.0M-B1	
D3601	8-719-106-53	DIODE RD10M-B2	
D3602	8-719-106-53	DIODE RD10M-B2	

<DELAY LINE>

Rf.NO.	PART NO.	DESCRIPTION	REMARK
DL3201	1-239-636-11	FILTER, LOW PASS	
DL3202	1-239-636-11	FILTER, LOW PASS	
DL3401	1-239-636-11	FILTER, LOW PASS	
DL3402	1-239-636-11	FILTER, LOW PASS	
DL3403	1-239-636-11	FILTER, LOW PASS	
DL3404	1-239-638-11	FILTER, LOW PASS	
DL3405	1-239-638-11	FILTER, LOW PASS	
DL3406	1-239-638-11	FILTER, LOW PASS	

<FERRITE BEAD>

Rf.NO.	PART NO.	DESCRIPTION	REMARK
FB3003	1-412-390-21	INDUCTOR CHIP 0UH	
FB3004	1-412-390-21	INDUCTOR CHIP 0UH	
FB3006	1-412-390-21	INDUCTOR CHIP 0UH	
FB3007	1-412-390-21	INDUCTOR CHIP 0UH	
FB3401	1-412-390-21	INDUCTOR CHIP 0UH	
FB3402	1-412-390-21	INDUCTOR CHIP 0UH	
FB3403	1-412-390-21	INDUCTOR CHIP 0UH	
FB3404	1-412-390-21	INDUCTOR CHIP 0UH	
FB3405	1-412-390-21	INDUCTOR CHIP 0UH	
FB3406	1-412-390-21	INDUCTOR CHIP 0UH	
FB3407	1-412-390-21	INDUCTOR CHIP 0UH	
FB3408	1-412-390-21	INDUCTOR CHIP 0UH	
FB3409	1-412-390-21	INDUCTOR CHIP 0UH	
FB3410	1-412-390-21	INDUCTOR CHIP 0UH	
FB3411	1-412-390-21	INDUCTOR CHIP 0UH	
FB3412	1-412-390-21	INDUCTOR CHIP 0UH	
FB3413	1-412-390-21	INDUCTOR CHIP 0UH	
FB3414	1-412-390-21	INDUCTOR CHIP 0UH	
FB3415	1-412-390-21	INDUCTOR CHIP 0UH	
FB3416	1-412-390-21	INDUCTOR CHIP 0UH	
FB3417	1-412-390-21	INDUCTOR CHIP 0UH	
FB3418	1-412-390-21	INDUCTOR CHIP 0UH	
FB3419	1-412-390-21	INDUCTOR CHIP 0UH	
FB3420	1-412-390-21	INDUCTOR CHIP 0UH	
FB3421	1-412-390-21	INDUCTOR CHIP 0UH	
FB3422	1-412-390-21	INDUCTOR CHIP 0UH	
FB3423	1-412-390-21	INDUCTOR CHIP 0UH	
FB3424	1-412-390-21	INDUCTOR CHIP 0UH	
FB3425	1-412-390-21	INDUCTOR CHIP 0UH	
FB3426	1-412-390-21	INDUCTOR CHIP 0UH	
FB3427	1-412-390-21	INDUCTOR CHIP 0UH	
FB3428	1-412-390-21	INDUCTOR CHIP 0UH	
FB3429	1-412-390-21	INDUCTOR CHIP 0UH	
FB3430	1-412-390-21	INDUCTOR CHIP 0UH	
FB3431	1-412-390-21	INDUCTOR CHIP 0UH	
FB3432	1-412-390-21	INDUCTOR CHIP 0UH	
FB3433	1-412-390-21	INDUCTOR CHIP 0UH	
FB3434	1-412-390-21	INDUCTOR CHIP 0UH	
FB3435	1-412-390-21	INDUCTOR CHIP 0UH	
FB3436	1-412-390-21	INDUCTOR CHIP 0UH	
FB3439	1-412-390-21	INDUCTOR CHIP 0UH	
FB3442	1-412-390-21	INDUCTOR CHIP 0UH	

<FILTER>

Rf.NO.	PART NO.	DESCRIPTION	REMARK
FL3001	1-239-558-11	FILTER, CHIP EMI	
FL3002	1-239-558-11	FILTER, CHIP EMI	
FL3003	1-239-558-11	FILTER, CHIP EMI	
FL3101	1-236-620-11	FILTER, LOW PASS	
FL3102	1-236-620-11	FILTER, LOW PASS	
FL3103	1-236-620-11	FILTER, LOW PASS	
FL3201	1-239-558-11	FILTER, CHIP EMI	
FL3202	1-239-558-11	FILTER, CHIP EMI	
FL3203	1-239-558-11	FILTER, CHIP EMI	
FL3401	1-239-558-11	FILTER, CHIP EMI	
FL3402	1-239-558-11	FILTER, CHIP EMI	
FL3403	1-239-558-11	FILTER, CHIP EMI	
FL3404	1-235-096-00	FILTER, LINE	
FL3405	1-235-096-00	FILTER, LINE	
FL3406	1-235-096-00	FILTER, LINE	
FL3407	1-239-558-11	FILTER, CHIP EMI	
FL3408	1-239-558-11	FILTER, CHIP EMI	
FL3409	1-239-558-11	FILTER, CHIP EMI	
FL3410	1-239-558-11	FILTER, CHIP EMI	
FL3411	1-239-558-11	FILTER, CHIP EMI	
FL3601	1-239-558-11	FILTER, CHIP EMI	
FL3602	1-239-558-11	FILTER, CHIP EMI	

<IC>

Rf.NO.	PART NO.	DESCRIPTION	REMARK
IC3002	8-752-372-78	IC CXD2024AQ	
IC3003	8-759-256-44	IC NJM2235M-TE2	
IC3004	8-759-710-07	IC NJM2234M	
IC3005	8-759-288-85	IC TDA4665T-T	
IC3006	8-759-710-07	IC NJM2234M	
IC3007	8-759-710-07	IC NJM2234M	
IC3008	8-759-295-47	IC TDA9141-N2C	
IC3009	8-752-062-80	IC CXA1686M	
IC3201	8-759-710-07	IC NJM2234M	
IC3202	8-759-710-07	IC NJM2234M	
IC3203	8-759-324-99	IC MM1118XFBE	
IC3204	8-752-067-05	IC CXA1739S	
IC3205	8-759-008-67	IC MC14066BF	
IC3401	8-752-337-04	IC CXD1176Q	
IC3402	8-752-337-04	IC CXD1176Q	

Rf.NO.	PART NO.	DESCRIPTION	REMARK
IC3403	8-752-337-04	IC CXD1176Q	
IC3404	8-752-365-06	IC CXK48324R-1	
IC3405	8-752-365-06	IC CXK48324R-1	
IC3406	8-752-365-06	IC CXK48324R-1	
IC3407	8-752-365-06	IC CXK48324R-1	
IC3408	8-752-365-06	IC CXK48324R-1	
IC3409	8-752-365-06	IC CXK48324R-1	
IC3410	8-752-338-46	IC CXD1178Q	
IC3411	8-759-504-46	IC PQ05RF1	
IC3412	8-759-504-46	IC PQ05RF1	
IC3413	8-759-054-12	IC PQ09RA1	
IC3414	8-759-231-58	IC TA7812S	
IC3415	8-752-328-71	IC CXD2000Q	
IC3416	8-752-328-71	IC CXD2000Q	
IC3417	8-759-925-74	IC SN74HC04ANS	
IC3418	8-752-360-43	IC CXK1203AQ	
IC3419	8-752-360-43	IC CXK1203AQ	
IC3420	8-759-103-09	IC uPC4082G2	
IC3421	8-759-008-67	IC MC14066BF	
IC3422	8-759-383-89	IC SN74AS1004ANS-E05	
IC3423	8-759-103-09	IC uPC4082G2	
IC3424	8-759-008-67	IC MC14066BF	
IC3425	8-759-383-89	IC SN74AS1004ANS-E05	
IC3426	8-759-925-76	IC SN74HC08ANS	
IC3427	8-759-008-45	IC MC74HC4538F	
IC3601	8-752-073-52	IC CXA2016S	
IC3602	8-752-073-52	IC CXA2016S	
IC3603	8-759-926-18	IC SN74HC157ANS	
IC3604	8-759-175-04	IC PCF8574T-T	
IC3605	8-752-058-68	IC CXA1315M	
IC3606	8-759-008-45	IC MC74HC4538F	
IC3607	8-759-008-45	IC MC74HC4538F	
IC3608	8-759-008-45	IC MC74HC4538F	
		<JACK>	
J3001	* 1-774-965-11	CONNECTOR, BNC (RECEPTACLE)	
J3201	1-779-506-11	CONNECTOR, BNC (RECEPTACLE)	
		<COIL>	
L3001	1-410-204-31	INDUCTOR CHIP 10UH	
L3002	1-410-478-11	INDUCTOR 47UH	
L3005	1-410-204-31	INDUCTOR CHIP 10UH	
L3008	1-410-204-31	INDUCTOR CHIP 10UH	
L3009	1-410-204-31	INDUCTOR CHIP 10UH	
L3010	1-410-204-31	INDUCTOR CHIP 10UH	
L3011	1-410-204-31	INDUCTOR CHIP 10UH	
L3012	1-410-204-31	INDUCTOR CHIP 10UH	
L3013	1-410-204-31	INDUCTOR CHIP 10UH	
L3014	1-410-200-31	INDUCTOR CHIP 4.7UH	
L3016	1-410-204-31	INDUCTOR CHIP 10UH	
L3017	1-410-204-31	INDUCTOR CHIP 10UH	
L3018	1-410-204-31	INDUCTOR CHIP 10UH	
L3019	1-410-218-31	INDUCTOR CHIP 150UH	
L3020	1-410-204-31	INDUCTOR CHIP 10UH	
L3201	1-410-204-31	INDUCTOR CHIP 10UH	
L3202	1-410-204-31	INDUCTOR CHIP 10UH	
L3203	1-410-213-51	INDUCTOR CHIP 56UH	
L3204	1-410-204-31	INDUCTOR CHIP 10UH	

Rf.NO.	PART NO.	DESCRIPTION	REMARK
L3205	1-410-200-31	INDUCTOR CHIP 4.7UH	
L3206	1-410-204-31	INDUCTOR CHIP 10UH	
L3437	1-402-640-11	COIL	
L3438	1-410-204-31	INDUCTOR CHIP 10UH	
L3440	1-402-640-11	COIL	
L3441	1-410-204-31	INDUCTOR CHIP 10UH	
L3601	1-410-200-31	INDUCTOR CHIP 4.7UH	
L3602	1-410-204-31	INDUCTOR CHIP 10UH	
L3603	1-410-204-31	INDUCTOR CHIP 10UH	
		<TRANSISTOR>	
Q3001	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3002	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3003	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3004	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3005	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3006	8-729-216-22	TRANSISTOR 2SA1162-G	
Q3007	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3008	1-801-806-11	TRANSISTOR DTC144EK-T146	
Q3010	8-729-216-22	TRANSISTOR 2SA1162-G	
Q3011	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3012	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3013	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3014	8-729-216-22	TRANSISTOR 2SA1162-G	
Q3015	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3016	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3017	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3018	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3019	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3021	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3022	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3023	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3024	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3025	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3026	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3027	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3028	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3029	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3030	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3031	8-729-216-22	TRANSISTOR 2SA1162-G	
Q3032	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3201	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3202	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3203	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3204	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3205	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3209	8-729-216-22	TRANSISTOR 2SA1162-G	
Q3210	8-729-216-22	TRANSISTOR 2SA1162-G	
Q3211	8-729-216-22	TRANSISTOR 2SA1162-G	
Q3212	8-729-216-22	TRANSISTOR 2SA1162-G	
Q3213	8-729-216-22	TRANSISTOR 2SA1162-G	
Q3214	8-729-216-22	TRANSISTOR 2SA1162-G	
Q3215	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3216	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3217	1-801-806-11	TRANSISTOR DTC144EK-T146	
Q3218	1-801-806-11	TRANSISTOR DTC144EK-T146	
Q3401	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3402	8-729-120-28	TRANSISTOR 2SC1623-L5L6	

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Rf.NO.	PART NO.	DESCRIPTION			REMARK
Q3403	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q3404	8-729-216-22	TRANSISTOR 2SA1162-G			
Q3405	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q3406	8-729-216-22	TRANSISTOR 2SA1162-G			
Q3407	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q3408	8-729-216-22	TRANSISTOR 2SA1162-G			
Q3409	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q3410	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q3411	8-729-216-22	TRANSISTOR 2SA1162-G			
Q3412	8-729-216-22	TRANSISTOR 2SA1162-G			
Q3413	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q3414	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q3415	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q3416	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q3417	8-729-216-22	TRANSISTOR 2SA1162-G			
Q3418	8-729-216-22	TRANSISTOR 2SA1162-G			
Q3419	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q3420	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q3421	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q3422	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q3423	8-729-216-22	TRANSISTOR 2SA1162-G			
	<RESISTOR>				
R3001	1-216-029-00	METAL GLAZE	150	5%	1/10W
R3002	1-216-029-00	METAL GLAZE	150	5%	1/10W
R3003	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R3004	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R3005	1-216-037-00	METAL GLAZE	330	5%	1/10W
R3006	1-216-033-00	METAL GLAZE	220	5%	1/10W
R3007	1-216-035-00	METAL GLAZE	270	5%	1/10W
R3008	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R3009	1-216-037-00	METAL GLAZE	330	5%	1/10W
R3010	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R3011	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R3012	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R3013	1-216-043-91	METAL GLAZE	560	5%	1/10W
R3014	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R3015	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R3016	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R3017	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R3018	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3019	1-216-647-11	METAL CHIP	680	0.50%	1/10W
R3020	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W
R3021	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R3025	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R3026	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R3027	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R3028	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R3029	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R3030	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R3031	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R3032	1-216-634-11	METAL CHIP	200	0.50%	1/10W
R3033	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R3034	1-216-043-91	METAL GLAZE	560	5%	1/10W
R3035	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R3036	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R3037	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R3038	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R3039	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R3040	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R3041	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W
R3042	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R3043	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R3044	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R3045	1-216-634-11	METAL CHIP	200	0.50%	1/10W
R3046	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R3047	1-216-043-91	METAL GLAZE	560	5%	1/10W
R3048	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R3049	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R3050	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R3051	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R3052	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R3053	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R3054	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R3055	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R3056	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R3057	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R3058	1-216-029-00	METAL GLAZE	150	5%	1/10W
R3059	1-216-029-00	METAL GLAZE	150	5%	1/10W
R3060	1-216-029-00	METAL GLAZE	150	5%	1/10W
R3061	1-216-029-00	METAL GLAZE	150	5%	1/10W
R3062	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R3063	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R3064	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3065	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3066	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R3067	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R3068	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R3069	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R3070	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3071	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3072	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3073	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3074	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3077	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R3078	1-216-091-00	METAL GLAZE	56K	5%	1/10W
R3079	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R3080	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R3081	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R3082	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W
R3083	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R3084	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R3085	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R3086	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R3087	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R3088	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R3089	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R3090	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R3091	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R3092	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R3093	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R3094	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R3095	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R3096	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R3097	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R3098	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R3099	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R3100	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W

Rf.NO.	PART NO.	DESCRIPTION			REMARK
R3101	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R3102	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R3103	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R3104	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R3105	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R3106	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R3107	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R3108	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R3109	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W
R3110	1-216-041-00	METAL GLAZE	470	5%	1/10W
R3111	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R3112	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R3113	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R3114	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R3115	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R3116	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W
R3201	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3202	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3203	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3204	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R3205	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R3206	1-216-029-00	METAL GLAZE	150	5%	1/10W
R3207	1-216-029-00	METAL GLAZE	150	5%	1/10W
R3208	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R3209	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R3210	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R3211	1-216-029-00	METAL GLAZE	150	5%	1/10W
R3212	1-216-029-00	METAL GLAZE	150	5%	1/10W
R3213	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R3214	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R3215	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R3216	1-216-029-00	METAL GLAZE	150	5%	1/10W
R3217	1-216-029-00	METAL GLAZE	150	5%	1/10W
R3218	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R3219	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R3220	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R3221	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R3222	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R3223	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R3224	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R3225	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W
R3226	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R3232	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3233	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R3234	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3235	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R3236	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3237	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R3238	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R3239	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W
R3240	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R3241	1-216-295-91	CONDUCTOR, CHIP			
R3242	1-216-075-00	METAL GLAZE	12K	5%	1/10W
R3243	1-216-075-00	METAL GLAZE	12K	5%	1/10W
R3244	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R3245	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R3246	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W
R3247	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R3248	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R3249	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R3250	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W
R3251	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R3252	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R3253	1-216-295-91	CONDUCTOR, CHIP			
R3254	1-216-043-91	METAL GLAZE	560	5%	1/10W
R3255	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R3256	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R3257	1-216-043-91	METAL GLAZE	560	5%	1/10W
R3258	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R3259	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R3261	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R3262	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R3263	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R3264	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R3265	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R3266	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R3267	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R3401	1-216-043-91	METAL GLAZE	560	5%	1/10W
R3402	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R3403	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R3404	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3405	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3406	1-216-673-11	METAL CHIP	8.2K	0.50%	1/10W
R3407	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R3408	1-216-043-91	METAL GLAZE	560	5%	1/10W
R3409	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R3410	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R3411	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3412	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3413	1-216-673-11	METAL CHIP	8.2K	0.50%	1/10W
R3414	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R3415	1-216-043-91	METAL GLAZE	560	5%	1/10W
R3416	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R3417	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R3418	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3419	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3420	1-216-673-11	METAL CHIP	8.2K	0.50%	1/10W
R3421	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R3422	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R3423	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R3424	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R3425	1-216-634-11	METAL CHIP	200	0.50%	1/10W
R3426	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R3427	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R3428	1-216-041-00	METAL GLAZE	470	5%	1/10W
R3429	1-216-041-00	METAL GLAZE	470	5%	1/10W
R3430	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3431	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R3432	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R3433	1-216-634-11	METAL CHIP	200	0.50%	1/10W
R3434	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R3435	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R3436	1-216-041-00	METAL GLAZE	470	5%	1/10W
R3437	1-216-041-00	METAL GLAZE	470	5%	1/10W
R3438	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3439	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R3440	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R3441	1-216-634-11	METAL CHIP	200	0.50%	1/10W
R3442	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R3443	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W

BA

Rf.NO.	PART NO.	DESCRIPTION			REMARK
R3444	1-216-041-00	METAL GLAZE	470	5%	1/10W
R3445	1-216-041-00	METAL GLAZE	470	5%	1/10W
R3446	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3447	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R3448	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R3449	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3450	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3451	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3452	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3453	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3454	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3455	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3456	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3457	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3458	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3459	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3460	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3461	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3462	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3463	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3464	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R3465	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W
R3466	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R3467	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R3468	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R3469	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R3470	1-216-041-00	METAL GLAZE	470	5%	1/10W
R3471	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R3472	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R3473	1-216-017-91	METAL GLAZE	47	5%	1/10W
R3474	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R3475	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R3476	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R3477	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R3478	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R3479	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R3480	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W
R3481	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R3482	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R3483	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R3484	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R3485	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R3486	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R3487	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3488	1-216-033-00	METAL GLAZE	220	5%	1/10W
R3489	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R3490	1-216-037-00	METAL GLAZE	330	5%	1/10W
R3491	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3492	1-216-041-00	METAL GLAZE	470	5%	1/10W
R3493	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R3494	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R3495	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W
R3496	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R3497	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R3498	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R3499	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R3500	1-216-041-00	METAL GLAZE	470	5%	1/10W
R3501	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R3502	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R3503	1-216-017-91	METAL GLAZE	47	5%	1/10W
R3504	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R3505	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R3506	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R3507	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R3508	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R3509	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R3510	1-216-675-11	METAL CHIP	10K	5%	1/10W
R3520	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W
R3521	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R3522	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R3523	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R3524	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R3525	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R3526	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R3527	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3528	1-216-033-00	METAL GLAZE	220	5%	1/10W
R3529	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R3530	1-216-037-00	METAL GLAZE	330	5%	1/10W
R3531	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3532	1-216-041-00	METAL GLAZE	470	5%	1/10W
R3533	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R3534	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3535	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R3536	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R3537	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R3538	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R3539	1-216-039-00	METAL GLAZE	390	5%	1/10W
R3540	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R3541	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3542	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R3543	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3544	1-216-698-11	METAL CHIP	91K	0.50%	1/10W
R3601	1-216-029-00	METAL GLAZE	150	5%	1/10W
R3602	1-216-029-00	METAL GLAZE	150	5%	1/10W
R3603	1-216-029-00	METAL GLAZE	150	5%	1/10W
R3604	1-216-029-00	METAL GLAZE	150	5%	1/10W
R3605	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R3606	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R3607	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R3608	1-216-677-11	METAL CHIP	12K	0.50%	1/10W
R3609	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R3610	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R3611	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R3612	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R3613	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R3614	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R3615	1-216-677-11	METAL CHIP	12K	0.50%	1/10W
R3616	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R3617	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R3618	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R3619	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3620	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3621	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3622	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3623	1-216-025-91	METAL GLAZE	100	5%	1/10W
R3624	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R3625	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R3626	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R3627	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R3628	1-216-695-11	METAL CHIP	68K	0.50%	1/10W

Rf.NO.	PART NO.	DESCRIPTION	REMARK
R3629	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R3630	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R3631	1-216-687-11	METAL CHIP 33K 0.50% 1/10W	
R3632	1-216-675-11	METAL CHIP 10K 0.50% 1/10W	
R3633	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W	
R3634	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R3635	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R3636	1-216-655-11	METAL CHIP 1.5K 0.50% 1/10W	
R3637	1-216-683-11	METAL CHIP 22K 0.50% 1/10W	
R3638	1-216-659-11	METAL CHIP 2.2K 0.50% 1/10W	
R3639	1-216-687-11	METAL CHIP 33K 0.50% 1/10W	
R3640	1-216-687-11	METAL CHIP 33K 0.50% 1/10W	
	<VARIABLE RESISTOR>		
RV3001	1-223-991-21	RES, CARBON ADJ VAR 1K	
RV3002	1-223-991-21	RES, CARBON ADJ VAR 1K	
RV3003	1-223-991-21	RES, CARBON ADJ VAR 1K	
RV3004	1-223-991-21	RES, CARBON ADJ VAR 1K	
RV3005	1-223-991-21	RES, CARBON ADJ VAR 1K	
RV3201	1-223-995-21	RES, CARBON ADJ VAR 10K	
RV3202	1-223-992-21	RES, CARBON ADJ VAR 2.2K	
RV3203	1-223-992-21	RES, CARBON ADJ VAR 2.2K	
RV3204	1-223-992-21	RES, CARBON ADJ VAR 2.2K	
	<SWITCH>		
S3001	1-570-898-11	SWITCH, SLIDE	
S3201	1-570-898-11	SWITCH, SLIDE	
S3601	1-553-977-31	SWITCH, SLIDE	
S3602	1-553-977-31	SWITCH, SLIDE	
	<CRYSTAL>		
X3001	1-760-795-11	VIBRATOR, CRYSTAL	
X3002	1-760-796-11	VIBRATOR, CRYSTAL	
X3003	1-577-611-11	OSCILALTOR, CERAMIC	
X3004	1-527-722-00	VIBRATOR, CRYSTAL	
X3005	1-579-057-11	VIBRATOR, CRYSTAL	

* * *

ACCESSORIES

	3-703-263-16	BAG, CONDUCTIV	
	3-856-104-02	MANUAL, INSTRUCTION (JAPANESE, ENGLESH, FRENCH, SPANISH, GERMAN, ITALIAN)	
	4-059-754-01	SCREW, PANEL	

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RM-PJ10

Rf.NO.	PART NO.	DESCRIPTION	REMARK
		J MOUNT	
	<CAPACITA>		
C1	1-126-157-11	ELECT 10MF 20% 16V	
C2	1-101-006-00	CERAMIC 0.01MF 10% 50V	
C3	1-126-157-11	ELECT 10MF 20% 16V	
	<DIODE>		
D1	8-719-109-93	DIODE MTZJ6.2	
	<IC>		
IC1	8-741-148-33	IC SBX1483-59	
	<JACK>		
J1	9-902-866-01	JACK	
J2	9-902-867-01	JACK	
	<TRANSISTOR>		
Q1	8-729-119-76	TRANSISTOR 2SA933S	
	<RESISTOR>		
R1	1-247-717-11	CARBON 2.2K 5% 1/4W	
R2	1-247-693-11	CARBON 27Ω 5% 1/4W	
R3	1-247-696-11	CARBON 47Ω 5% 1/4W	
R4	1-247-725-11	CARBON 10K 5% 1/4W	

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ACCESSORIES

	1-696-607-11	CORD, CONNECTION (WITH PLUG)	
	3-755-631-11	MANUAL, INSTRUCTION (JAPANESE, ENGLISH, FRENCH, GERMAN)	

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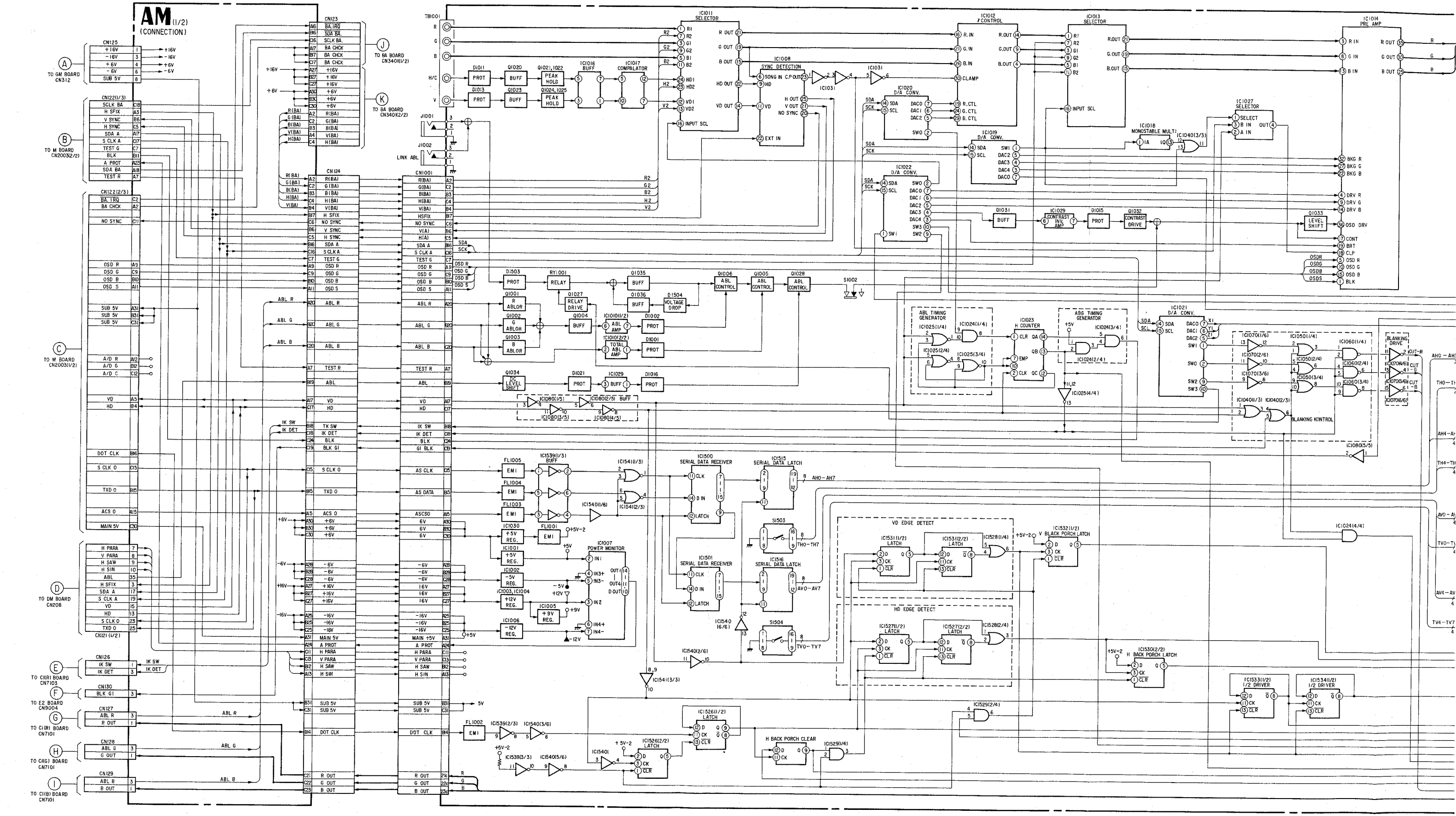
PWK-411D

ACCESSORIES

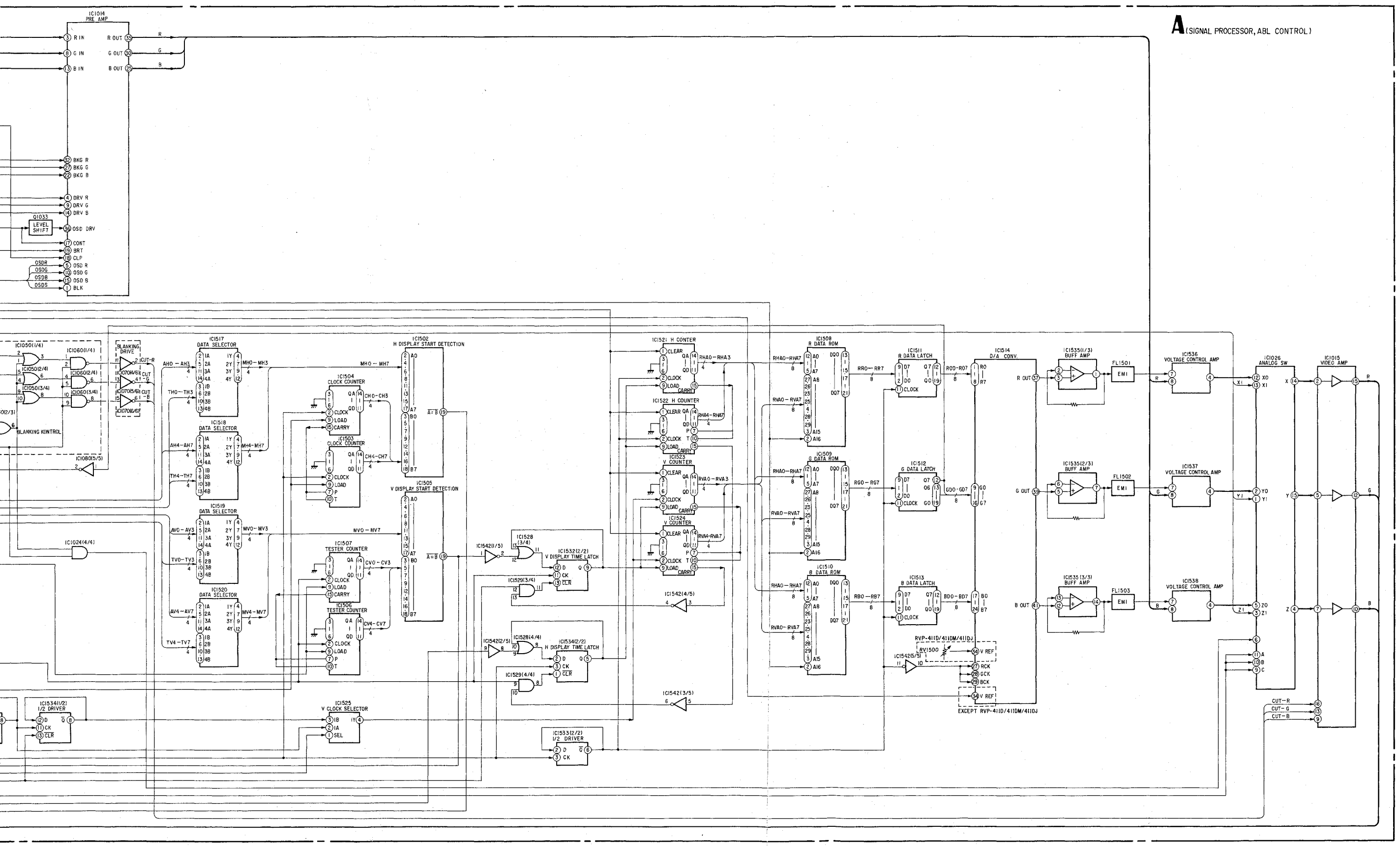
	1-473-443-11	REMOTE COMMANDER (RM-PJ1292)	
	1-782-364-11	CORD, CONNECTION (WITH MINIATU)	
	3-856-141-13	MANUAL, ESTABLISHMENT (ENGLISH)	
	3-856-141-22	MANUAL, ESTABLISHMENT (FRENCH)	
	3-856-141-31	MANUAL, ESTABLISHMENT (SPANISH)	
	3-856-141-42	MANUAL, ESTABLISHMENT (GERMAN)	(AEP)
	3-856-141-51	MANUAL, ESTABLISHMENT (ITALIAN)	(AEP)

SECTION 9
BLOCK DIAGRAM

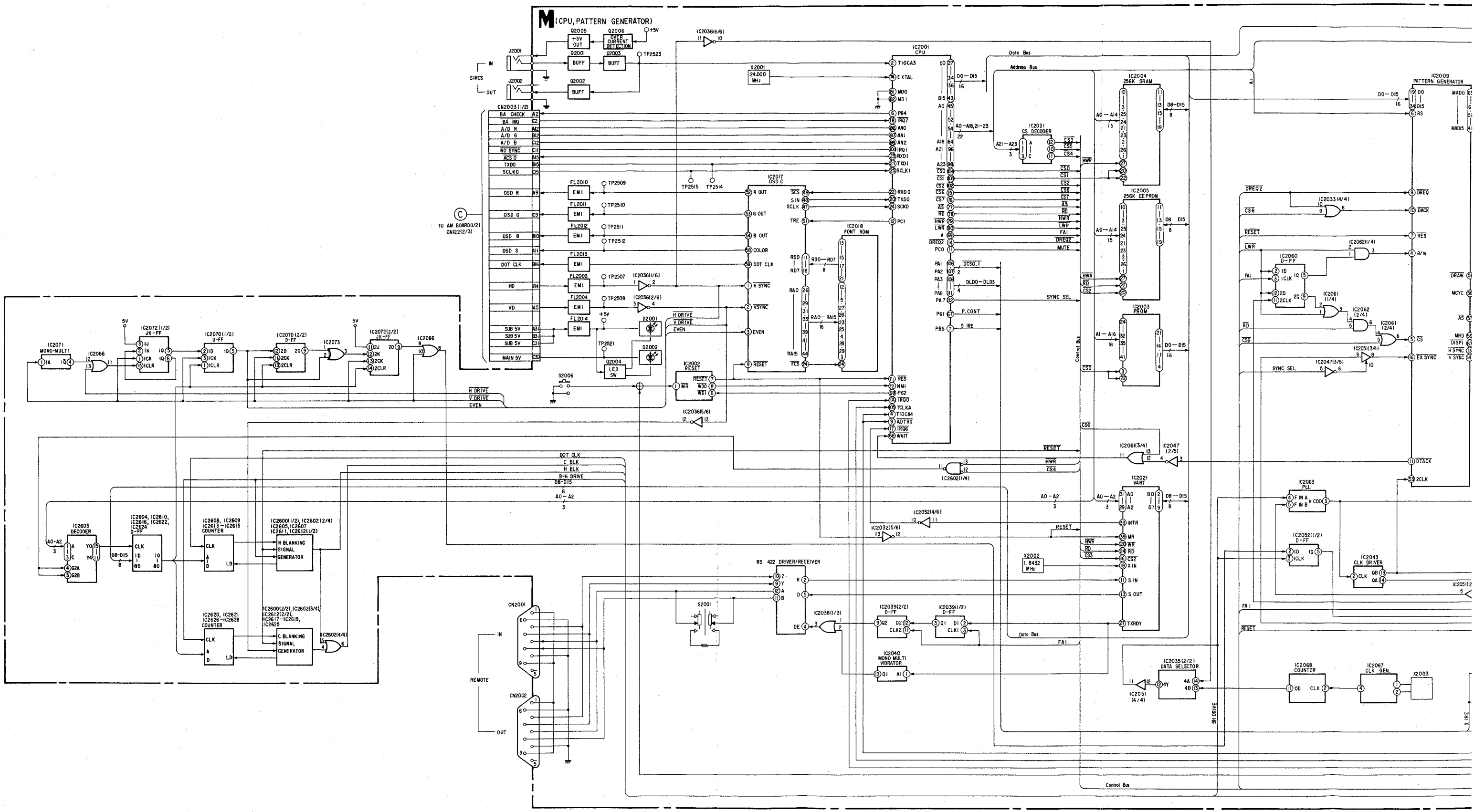
RVP-411D/411DM/411DS/411DMS/511DS/511DMS, CHP-411D/411DM

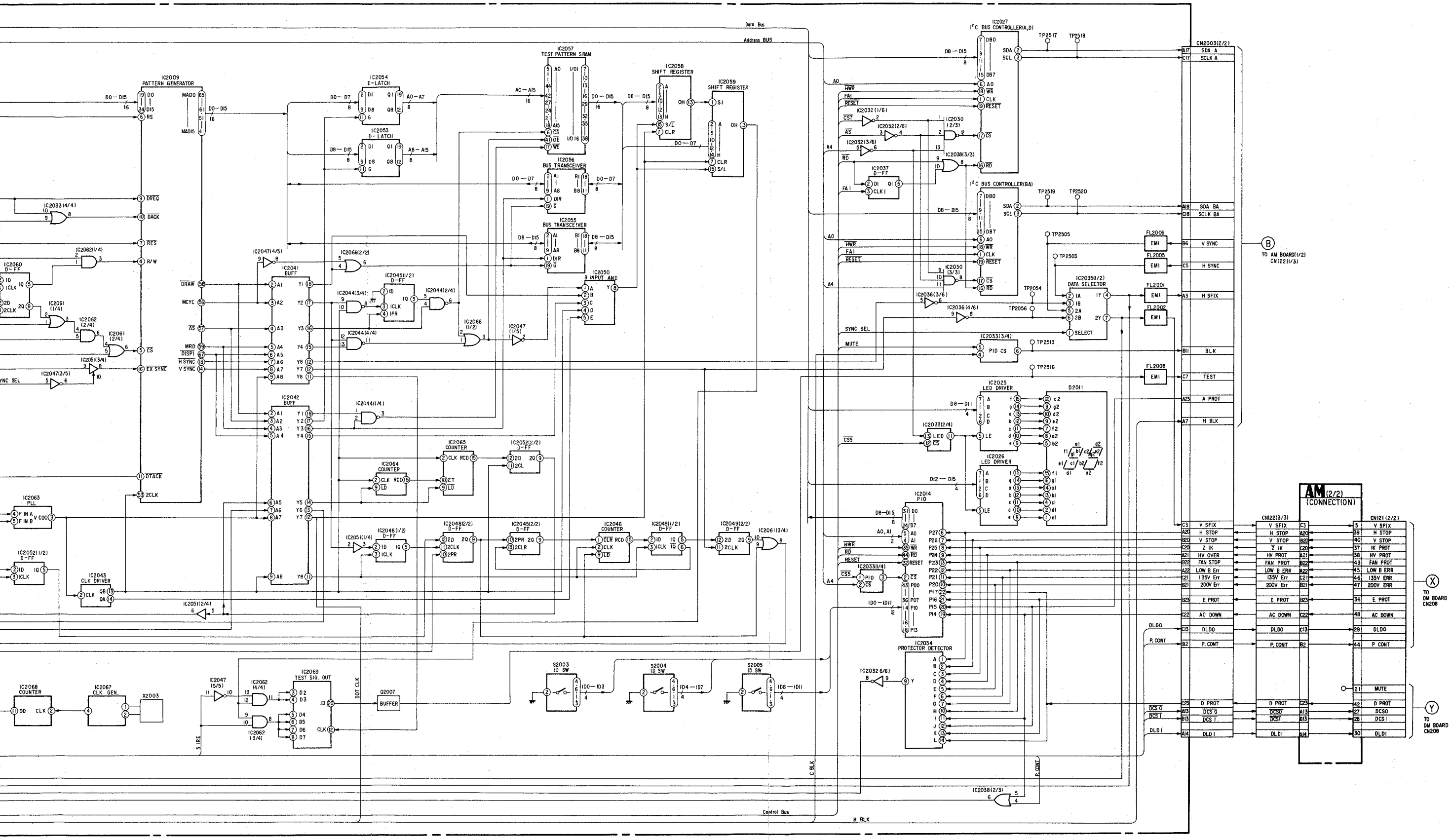

AM (1/2)
(CONNECTION)
CN125
TO GM BOARD CN312
TO M BOARD CN2003(2/2)
TO M BOARD CN2003(1/2)
TO DM BOARD CN208
TO C(R) BOARD CN7103
TO E2 BOARD CN9004
TO C(R) BOARD CN7101
TO C(G) BOARD CN7101
TO C(B) BOARD CN7101
CN122(1/3)
CN122(2/3)
CN121(1/2)
CN126
CN130
CN127
CN128
CN129
CN123
CN124
CN1001
TO BA BOARD CN3401(1/2)
TO BA BOARD CN3401(2/2)
TB1001
J1001
J1002
LINK ABL
IC1011 SELECTOR
IC1012 Y CONTROL
IC1013 SELECTOR
IC1014 PRE AMP
IC1008 SYNC DETECTION
IC1020 D/A CONV.
IC1019 D/A CONV.
IC1022 D/A CONV.
IC1021 D/A CONV.
IC1018 MONOSTABLE MULTI
IC1027 SELECTOR
IC1016 BUFF
IC1017 COMPALATOR
D1011 PROT
Q1020 BUFF
Q1021, 1022 PEAK HOLD
Q1024, 1025 PEAK HOLD
Q1031 BUFF
IC1029 CONTRAST INV. AMP
D1015 PROT
Q1032 CONTRAST DRIVE
Q1033 LEVEL SHIFT
D1503 PROT
RY1001 RELAY
Q1027 RELAY DRIVE
Q1035 BUFF
Q1036 BUFF
D1504 VOLTAGE DROP
Q1006 ABL CONTROL
Q1005 ABL CONTROL
Q1028 ABL CONTROL
S1002
Q1001 R ABLOR
Q1002 G ABLOR
Q1003 B ABLOR
IC1010(1/2) ABL AMP
IC1010(2/2) TOTAL ABL AMP
Q1004 BUFF
D1002 PROT
D1001 PROT
Q1034 DC LEVEL SHIFT
D1021 PROT
IC1029 BUFF
D1016 PROT
ABL TIMING GENERATOR
IC1023 H COUNTER
ABG TIMING GENERATOR
BLANKING DRIVE
BLANKING KONTROL
FL1005 EMI
FL1004 EMI
FL1003 EMI
FL1001 EMI
FL1002 EMI
IC1539(1/3) BUFF
IC1030 +5V REG.
IC1001 +5V REG.
IC1002 -5V REG.
IC1003, IC1004 +12V REG.
IC1005 +9V REG.
IC1006 -12V REG.
IC1007 POWER MONITOR
IC1500 SERIAL DATA RECEIVER
IC1501 SERIAL DATA RECEIVER
IC1515 SERIAL DATA LATCH
IC1516 SERIAL DATA LATCH
S1503
S1504
AHO-AH7
THO-TH7
AVO-AV7
TVO-TV7
VD EDGE DETECT
HD EDGE DETECT
IC1531(1/2) LATCH
IC1531(2/2) LATCH
IC1527(1/2) LATCH
IC1527(2/2) LATCH
IC1532(1/2) V BLACK PORCH LATCH
IC1530(2/2) H BACK PORCH LATCH
IC1526(1/2) LATCH
IC1526(2/2) LATCH
H BACK PORCH CLEAR
IC1533(1/2) 1/2 DRIVER
IC1534(1/2) 1/2 DRIVER

A, AM (1/2)

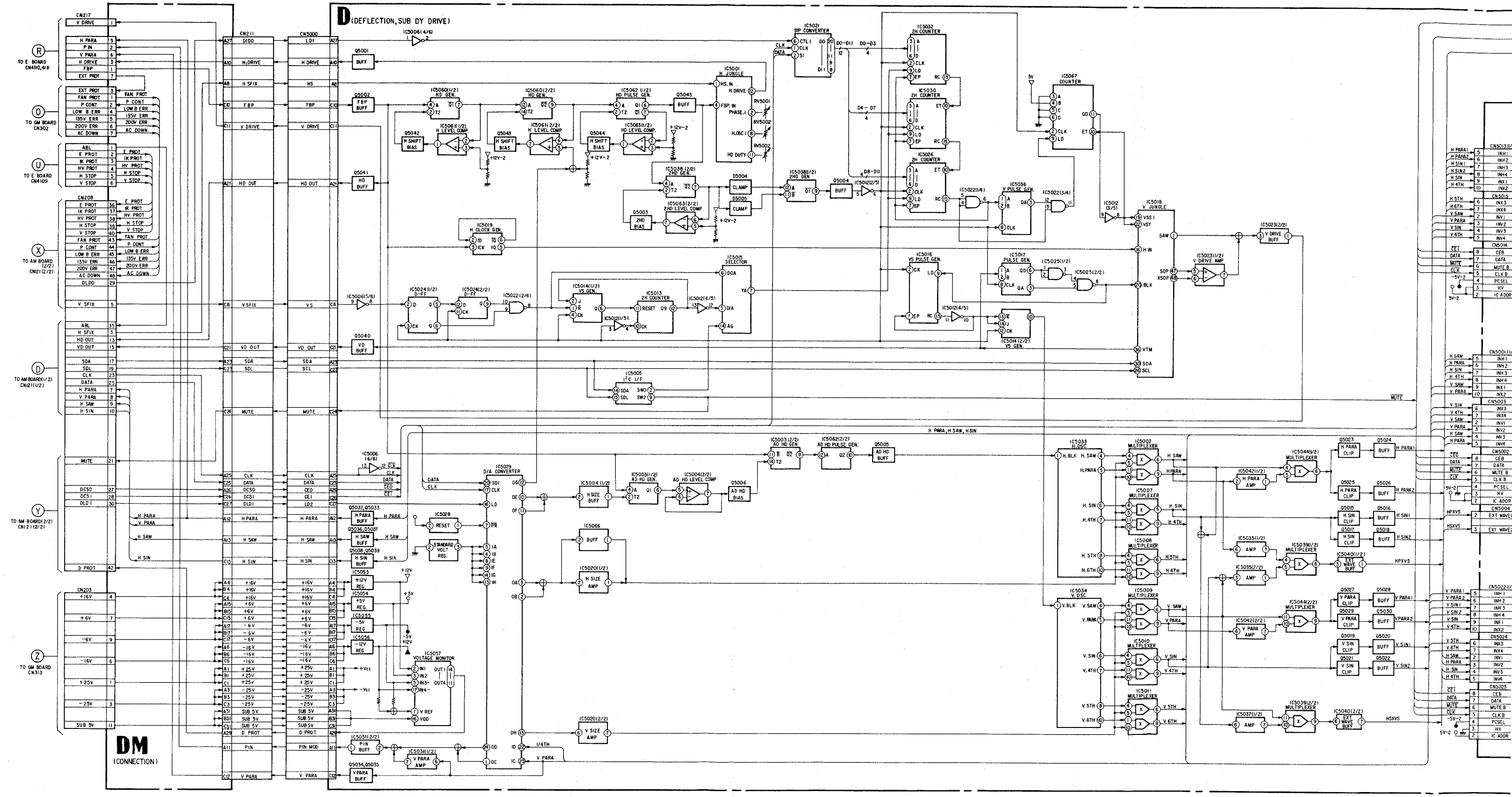

A (SIGNAL PROCESSOR, ABL CONTROL)
IC1014 PRE AMP
R IN
G IN
B IN
R OUT
G OUT
B OUT
BKG R
BKG G
BKG B
DRV R
DRV G
DRV B
Q1033 LEVEL SHIFT
OSD DRV
CONT
BRT
CLP
OSD R
OSD G
OSD B
BLK
OSDR
OSDG
OSDB
OSDS
IC1050(1/4)
IC1050(2/4)
IC1050(3/4)
IC1060(1/4)
IC1060(2/4)
IC1060(3/4)
BLANKING DRIVE
IC1070(4/6)
IC1070(5/6)
IC1070(6/6)
CUT-R
CUT-G
CUT-B
BLANKING KONTROL
IC1080(5/5)
IC1024(4/4)
IC1517 DATA SELECTOR
IC1518 DATA SELECTOR
IC1519 DATA SELECTOR
IC1520 DATA SELECTOR
AH0-AH3
TH0-TH3
AH4-AH7
TH4-TH7
AV0-AV3
TV0-TV3
AV4-AV7
TV4-TV7
MH0-MH3
MH4-MH7
MV0-MV3
MV4-MV7
IC1504 CLOCK COUNTER
IC1503 CLOCK COUNTER
IC1507 TESTER COUNTER
IC1506 TESTER COUNTER
CH0-CH3
CH4-CH7
CV0-CV3
CV4-CV7
CLOCK
LOAD
CARRY
IC1502 H DISPLAY START DETECTION
IC1505 V DISPLAY START DETECTION
MH0-MH7
MV0-MV7
A=B
IC1542(1/5)
IC1528(3/4)
IC1532(2/2) V DISPLAY TIME LATCH
IC1529(3/4)
IC1542(2/5)
IC1528(4/4)
IC1534(2/2) H DISPLAY TIME LATCH
IC1529(4/4)
IC1534(1/2) 1/2 DRIVER
IC1525 V CLOCK SELECTOR
IC1533(2/2) 1/2 DRIVER
IC1521 H CONTER
IC1522 H COUNTER
IC1523 V COUNTER
IC1524 V COUNTER
CLEAR
RHA0-RHA3
RHA4-RHA7
RVA0-RVA3
RVA4-RVA7
IC1542(4/5)
IC1542(3/5)
IC1508 R DATA ROM
IC1509 G DATA ROM
IC1510 B DATA ROM
RHA0-RHA7
RVA0-RVA7
RR0-RR7
RG0-RG7
RB0-RB7
IC1511 R DATA LATCH
IC1512 G DATA LATCH
IC1513 B DATA LATCH
RD0-RD7
GD0-GD7
BD0-BD7
IC1514 D/A CONV.
R OUT
G OUT
B OUT
RCK
GCK
BCK
V REF
RVP-411D/411DM/411DJ
RV1500
IC1542(5/5)
EXCEPT RVP-411D/411DM/411DJ
IC1535(1/3) BUFF AMP
IC1535(2/3) BUFF AMP
IC1535(3/3) BUFF AMP
FL1501
FL1502
FL1503
EMI
IC1536 VOLTAGE CONTROL AMP
IC1537 VOLTAGE CONTROL AMP
IC1538 VOLTAGE CONTROL AMP
IC1026 ANALOG SW
X0
X1
Y0
Y1
Z0
Z1
IC1015 VIDEO AMP
CUT-R
CUT-G
CUT-B

9-1


M (CPU, PATTERN GENERATOR)
Q2005 +5V OUT
Q2006 OVER CURRENT DETECTION
Q2001 BUFF
Q2003 BUFF
Q2002 BUFF
J2001
J2002
SIRCS
IN
OUT
TP2523
CN2003 (1/2)
BA CHECK
BA IRQ
A/D R
A/D G
A/D B
NO SYNC
ACS 0
TXDO
SCLKO
OSD R
OSD G
OSD B
OSD S
DOT CLK
HD
VD
SUB 5V
MAIN 5V
C
TO AM BOARD(1/2) CN122(2/3)
FL2010 EMI
FL2011 EMI
FL2012 EMI
FL2013 EMI
FL2003 EMI
FL2004 EMI
FL2014 EMI
TP2509
TP2510
TP2511
TP2512
TP2507
TP2508
TP2521
TP2515
TP2514
IC2036(6/6)
IC2036(1/6)
IC2036(2/6)
IC2036(5/6)
D2001
D2002
Q2004 LED SW
S2006
IC2002 RESET
IC2017 OSD C
IC2018 FONT ROM
IC2001 CPU
X2001 24.000 MHz
Data Bus
Address Bus
Control Bus
IC2031 CS DECODER
IC2004 256K SRAM
IC2005 256K EE PROM
IC2003 PROM
IC2021 VART
X2002 1.8432 MHz
IC2009 PATTERN GENERATOR
IC2033(4/4)
IC2062(1/4)
IC2060 D-FF
IC2061(1/4)
IC2062(2/4)
IC2061(2/4)
IC2051(3/4)
IC2047(3/5)
IC2061(3/4)
IC2047(2/5)
IC2602(1/4)
IC2063 PLL
IC2052(1/2) D-FF
IC2043 CLK DRIVER
IC2068 COUNTER
IC2067 CLK GEN.
X2003
IC2035(2/2) DATA SELECTOR
IC2051(4/4)
IC2032(4/6)
IC2032(5/6)
RS 422 DRIVER/RECEIVER
IC2038(1/3)
IC2039(2/2) D-FF
IC2039(1/2) D-FF
IC2040 MONO MULTI VIBRATOR
S2001
CN2001
CN2002
REMOTE
IN
OUT
IC2071 MONO-MULTI
IC2066
IC2072(1/2) JK-FF
IC2070(1/2) D-FF
IC2070(2/2) D-FF
IC2073
IC2072(2/2) JK-FF
H DRIVE
V DRIVE
EVEN
DOT CLK
C BLK
H BLK
B-H DRIVE
D8-D15
A0-A2
IC2603 DECODER
IC2604, IC2610, IC2616, IC2622, IC2624 D-FF
IC2608, IC2609 IC2613-IC2615 COUNTER
IC2600(1/2), IC2602(2/4) IC2605, IC2607 IC2611, IC2612(1/2)
H BLANKING SIGNAL GENERATOR
IC2620, IC2621 IC2626-IC2628 COUNTER
IC2600(2/2), IC2602(3/4) IC2612(2/2), IC2617-IC2619, IC2625
C BLANKING SIGNAL GENERATOR
IC2602(4/4)
SYNC SEL
P.CONT
S IRE
BH DRIVE
FA I
RESET


Data Bus
Address BUS
Control Bus
IC2009 PATTERN GENERATOR
IC2054 D-LATCH
IC2053 D-LATCH
IC2057 TEST PATTERN SRAM
IC2056 BUS TRANSCEIVER
IC2055 BUS TRANSCEIVER
IC2058 SHIFT REGISTER
IC2059 SHIFT REGISTER
IC2050 8 INPUT AND
IC2041 BUFF
IC2042 BUFF
IC2060 D-FF
IC2061 (1/4)
IC2062 (1/4)
IC2062 (2/4)
IC2061 (2/4)
IC2051 (3/4)
IC2047 (3/5)
IC2033 (4/4)
IC2047 (4/5)
IC2066 (2/2)
IC2045 (1/2) D-FF
IC2044 (2/4)
IC2044 (3/4)
IC2044 (4/4)
IC2066 (1/2)
IC2047 (1/5)
IC2044 (1/4)
IC2065 COUNTER
IC2052 (2/2) D-FF
IC2064 COUNTER
IC2063 PLL
IC2052 (1/2) D-FF
IC2043 CLK DRIVER
IC2051 (2/4)
IC2051 (1/4)
IC2048 (1/2) D-FF
IC2048 (2/2) D-FF
IC2045 (2/2) D-FF
IC2046 COUNTER
IC2049 (1/2) D-FF
IC2049 (2/2) D-FF
IC2061 (3/4)
IC2068 COUNTER
IC2067 CLK GEN.
X2003
IC2047 (5/5)
IC2062 (4/4)
IC2062 (3/4)
IC2069 TEST SIG. OUT
DOT CLK
Q2007 BUFFER
S2003 ID SW
S2004 ID SW
S2005 ID SW
C BLK
P. CONT
H BLK
IC2027 I²C BUS CONTROLLER(A,D)
TP2517
TP2518
IC2032 (1/6)
IC2032 (2/6)
IC2032 (3/6)
IC2030 (2/3)
IC2038 (3/3)
IC2037 D-FF
I²C BUS CONTROLLER(BA)
TP2519
TP2520
TP2505
TP2503
IC2030 (3/3)
IC2036 (3/6)
IC2036 (4/6)
IC2035 (1/2) DATA SELECTOR
TP2054
TP2056
SYNC SEL
MUTE
IC2033 (3/4) PID CS
TP2513
TP2516
IC2025 LED DRIVER
D2011
IC2033 (2/4) LED
IC2026 LED DRIVER
IC2014 PIO
IC2033 (1/4) PIO
IC2034 PROTECTOR DETECTOR
IC2032 (6/6)
IC2038 (2/3)
FL2006 EMI
FL2005 EMI
FL2001 EMI
FL2002 EMI
FL2008 EMI
CN2003 (2/2)
SDA A
SCLK A
SDA BA
SCLK BA
V SYNC
H SYNC
H SFIX
BLK
TEST
A PROT
H BLK
B
TO AM BOARD (1/2) CN122 (1/3)
AM (2/2) (CONNECTION)
CN122 (3/3)
CN121 (2/2)
V SFIX
H STOP
V STOP
Z IK
HV OVER
HV PROT
FAN STOP
FAN PROT
LOW B Err
LOW B ERR
135V Err
200V Err
E PROT
AC DOWN
DLDO
P. CONT
MUTE
D PROT
DCS 0
DCS 1
DLD I
X
TO DM BOARD CN208
Y
TO DM BOARD CN208

D, DM, D1R, D1G, D1B, D2, D3


D (DEFLECTION, SUB DY DRIVE)
DM (CONNECTION)
TO E BOARD CN4110, 4111
TO GM BOARD CN302
TO E BOARD CN4109
TO AM BOARD (2/2) CN121 (2/2)
TO AM BOARD (1/2) CN121 (1/2)
TO AM BOARD (2/2) CN121 (2/2)
TO GM BOARD CN313
CN217
CN211
CN5000
CN208
CN203
IC5001 H JUNGLE
IC5021 SIP CONVERTER
IC5032 2H COUNTER
IC5030 2H COUNTER
IC5026 2H COUNTER
IC5067 COUNTER
IC5060 (1/2) HD GEN.
IC5060 (2/2) HD GEN.
IC5062 (1/2) HD PULSE GEN.
IC5061 (1/2) H LEVEL COMP
IC5061 (2/2) H LEVEL COMP
IC5063 (1/2) HD LEVEL COMP.
IC5063 (2/2) 2HD LEVEL COMP
IC5038 (2/2) 2HD GEN.
IC5019 H CLOCK GEN.
IC5015 SELECTOR
IC5016 VS PULSE GEN.
IC5017 PULSE GEN.
IC5036 V PULSE GEN.
IC5018 V JUNGLE
IC5023 (1/2) V DRIVE AMP
IC5023 (2/2) V DRIVE BUFF
IC5014 (1/2) VS GEN.
IC5014 (2/2) VS GEN.
IC5013 2H COUNTER
IC5024 (1/2) D-FF
IC5024 (2/2) D-FF
IC5005 I²C 1/7
IC5029 D/A CONVERTER
IC5028 RESET
STANDARD VOLT REG.
IC5053 +12V REG.
IC5054 +5V REG.
IC5055 -5V REG.
IC5056 -12V REG.
IC5057 VOLTAGE MONITOR
IC5003 (2/2) AD HD GEN
IC5062 (2/2) AD HD PULSE GEN.
IC5003 (1/2) AD HD GEN.
IC5004 (2/2) AD HD LEVEL COMP
Q5006 AD HD BIAS
IC5004 (1/2) H SIZE BUFF
IC5066 BUFF
IC5020 (1/2) H SIZE AMP
IC5020 (2/2) V SIZE AMP
IC5031 (2/2) PIN BUFF
IC5031 (1/2) V PARA AMP
Q5034, Q5035 V PARA BUFF
IC5033 H. OSC
IC5034 V. OSC
IC5002 MULTIPLEXER
IC5007 MULTIPLEXER
IC5008 MULTIPLEXER
IC5009 MULTIPLEXER
IC5010 MULTIPLEXER
IC5011 MULTIPLEXER
IC5044 (1/2) MULTIPLEXER
IC5044 (2/2) MULTIPLEXER
IC5039 (1/2) MULTIPLEXER
IC5039 (2/2) MULTIPLEXER
IC5042 (1/2) H PARA AMP
IC5042 (2/2) V PARA AMP
IC5035 (1/2) AMP
IC5035 (2/2) AMP
IC5037 (1/2) AMP
IC5040 (1/2) EXT WAVE BUFF
IC5040 (2/2) EXT WAVE BUFF
Q5001 BUFF
Q5002 FBP BUFF
Q5041 HD BUFF
Q5040 VD BUFF
Q5042 H SHIFT BIAS
Q5043 H SHIFT BIAS
Q5044 H SHIFT BIAS
Q5045 BUFF
Q5003 2HD BIAS
Q5004 BUFF
Q5005 AD HD BUFF
D5004 CLAMP
D5005 CLAMP
Q5032, Q5033 H PARA BUFF
Q5036, Q5037 H SAW BUFF
Q5038, Q5039 H SIN BUFF
Q5023 H PARA CLIP
Q5025 H PARA CLIP
Q5015 H SIN CLIP
Q5017 H SIN CLIP
Q5027 V PARA CLIP
Q5029 V PARA CLIP
Q5019 V SIN CLIP
Q5021 V SIN CLIP
RV5001 H. IN PHASE
RV5002 H.OSC
RV5003 HD DUTY
H PARA, H SAW, H SIN
MUTE
HPXVS
HSXVS
CN5013 (1/2)
CN5015
CN5014
CN5001 (1/2)
CN5003
CN5002
CN5004
CN5022 (1/2)
CN5024
CN5023

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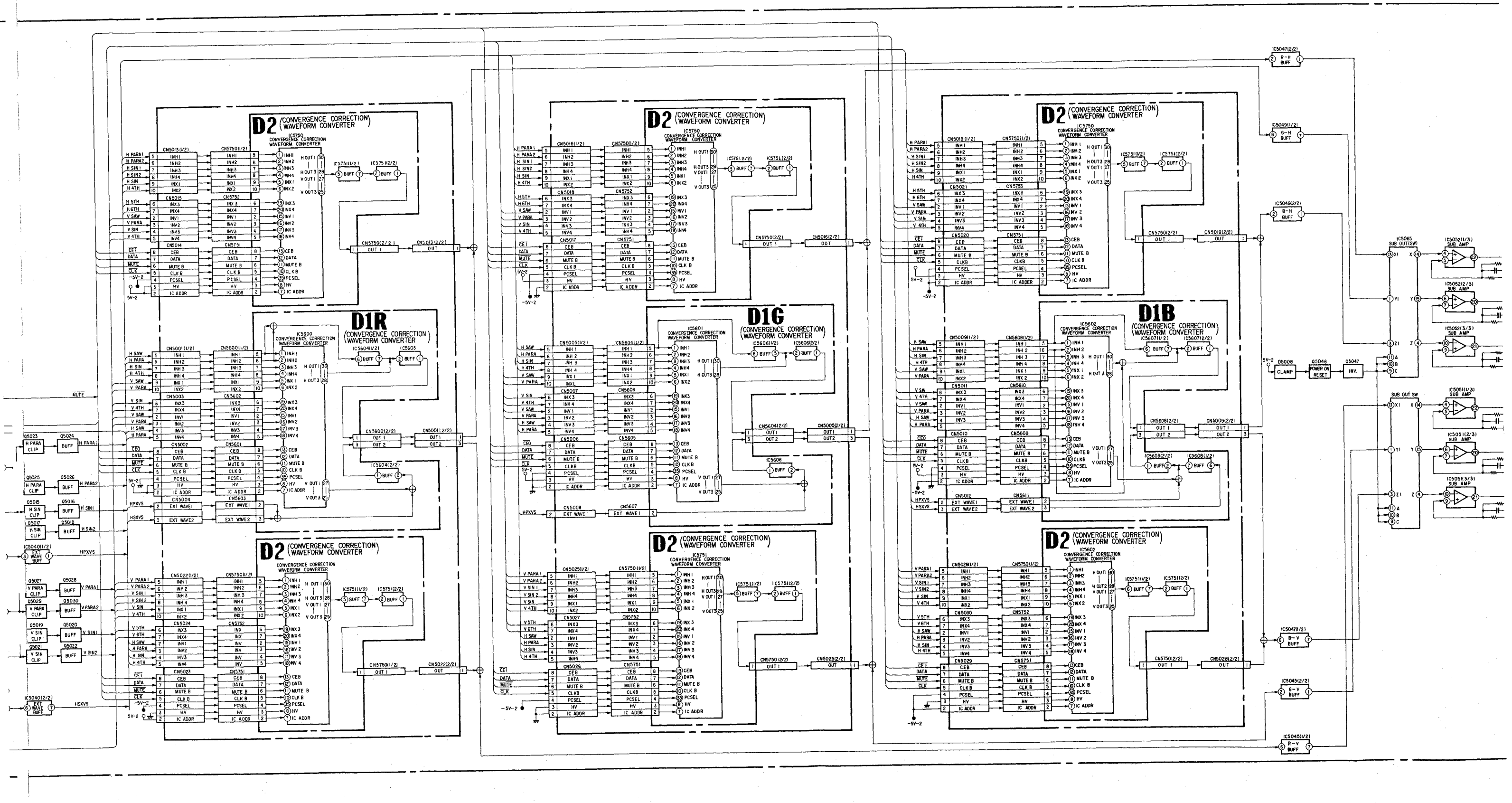
D, DM, D1R, D1G, D1B, D2, D3


D2 (CONVERGENCE CORRECTION WAVEFORM CONVERTER)
D1R (CONVERGENCE CORRECTION WAVEFORM CONVERTER)
D1G (CONVERGENCE CORRECTION WAVEFORM CONVERTER)
D1B (CONVERGENCE CORRECTION WAVEFORM CONVERTER)
IC5750 CONVERGENCE CORRECTION WAVEFORM CONVERTER
IC5751 CONVERGENCE CORRECTION WAVEFORM CONVERTER
IC5600 CONVERGENCE CORRECTION WAVEFORM CONVERTER
IC5601 CONVERGENCE CORRECTION WAVEFORM CONVERTER
IC5602 CONVERGENCE CORRECTION WAVEFORM CONVERTER
IC5751(1/2) BUFF
IC5751(2/2) BUFF
IC5604(1/2) BUFF
IC5604(2/2) BUFF
IC5603 BUFF
IC5606(1/2) BUFF
IC5606(2/2) BUFF
IC5607(1/2) BUFF
IC5607(2/2) BUFF
IC5608(1/2) BUFF
IC5608(2/2) BUFF
CN5013
CN5015
CN5014
CN5001
CN5003
CN5002
CN5004
CN5022
CN5024
CN5023
CN5016
CN5018
CN5017
CN5005
CN5007
CN5006
CN5008
CN5025
CN5027
CN5026
CN5019
CN5021
CN5020
CN5009
CN5011
CN5010
CN5012
CN5028
CN5030
CN5029
CN5750
CN5752
CN5751
CN5601
CN5602
CN5603
CN5604
CN5605
CN5606
CN5607
CN5608
CN5609
CN5610
CN5611
INH1
INH2
INH3
INH4
INX1
INX2
INX3
INX4
INV1
INV2
INV3
INV4
CEB
DATA
MUTE B
CLK B
PCSEL
HV
IC ADDR
EXT WAVE1
EXT WAVE2
H OUT1
H OUT3
V OUT1
V OUT3
OUT1
OUT2
H PARA1
H PARA2
H SIN1
H SIN2
H SIN
H 4TH
H 5TH
H 6TH
V SAW
V PARA
V SIN
V 4TH
V PARA1
V PARA2
V SIN1
V SIN2
V 5TH
V 6TH
H SAW
H PARA
CE1
MUTE
CLK
-5V-2
5V-2
HPXVS
HSXVS
Q5023 H PARA CLIP
Q5024 BUFF
Q5025 H PARA CLIP
Q5026 BUFF
Q5015 H SIN CLIP
Q5016 BUFF
Q5017 H SIN CLIP
Q5018 BUFF
IC5040(1/2) EXT WAVE BUFF
Q5027 V PARA CLIP
Q5028 BUFF
Q5029 V PARA CLIP
Q5030 BUFF
Q5019 V SIN CLIP
Q5020 BUFF
Q5021 V SIN CLIP
Q5022 BUFF
IC5040(2/2) EXT WAVE BUFF
IC5047(2/2) R-H BUFF
IC5049(1/2) G-H BUFF
IC5049(2/2) B-H BUFF
IC5065 SUB OUT(SW)
SUB OUT SW
IC5052(1/3) SUB AMP
IC5052(2/3) SUB AMP
IC5052(3/3) SUB AMP
IC5051(1/3) SUB AMP
IC5051(2/3) SUB AMP
IC5051(3/3) SUB AMP
D5008 CLAMP
Q5046 POWER ON RESET
Q5047 INV.
IC5047(1/2) B-V BUFF
IC5045(2/2) G-V BUFF
IC5045(1/2) R-V BUFF

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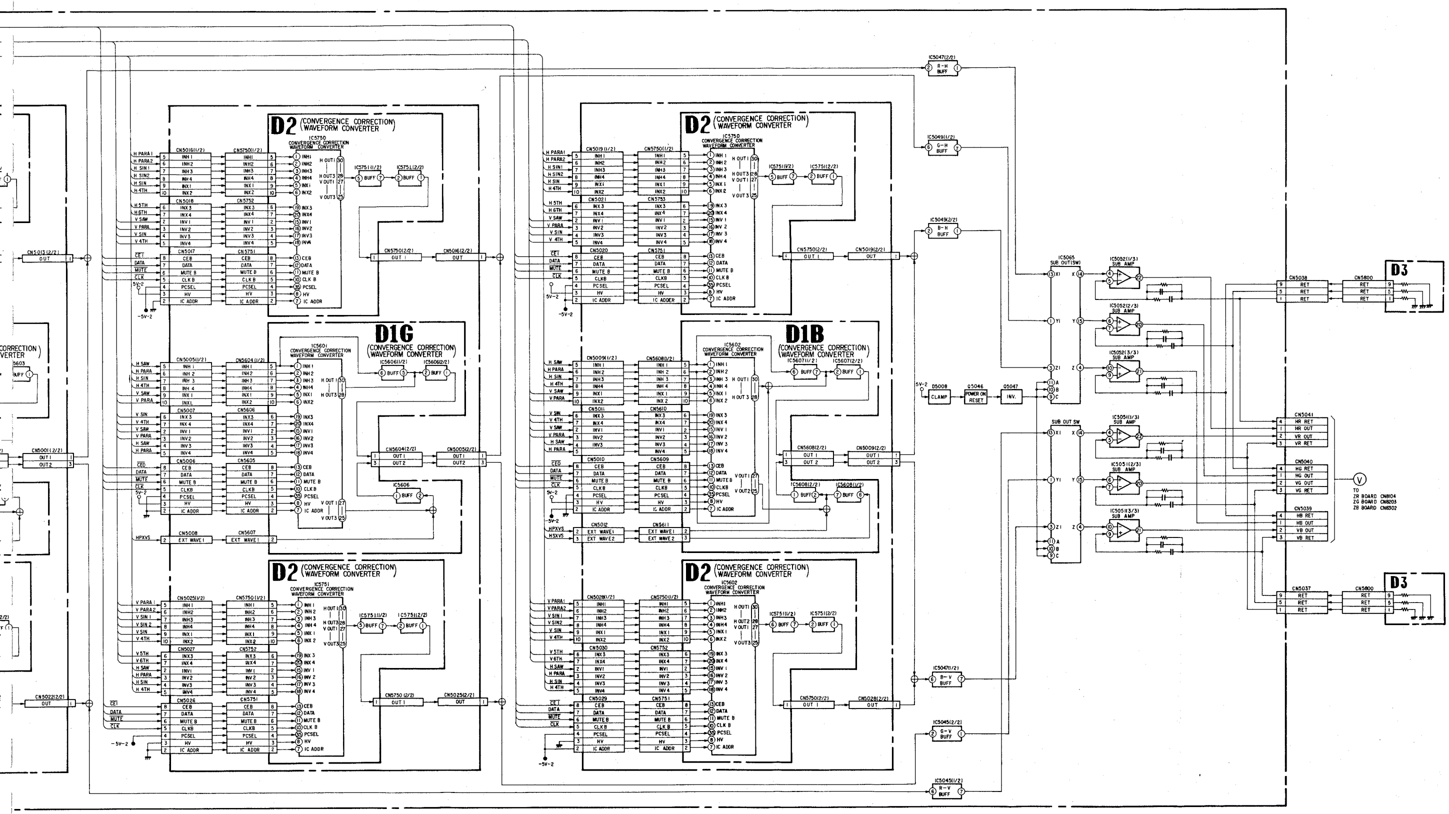
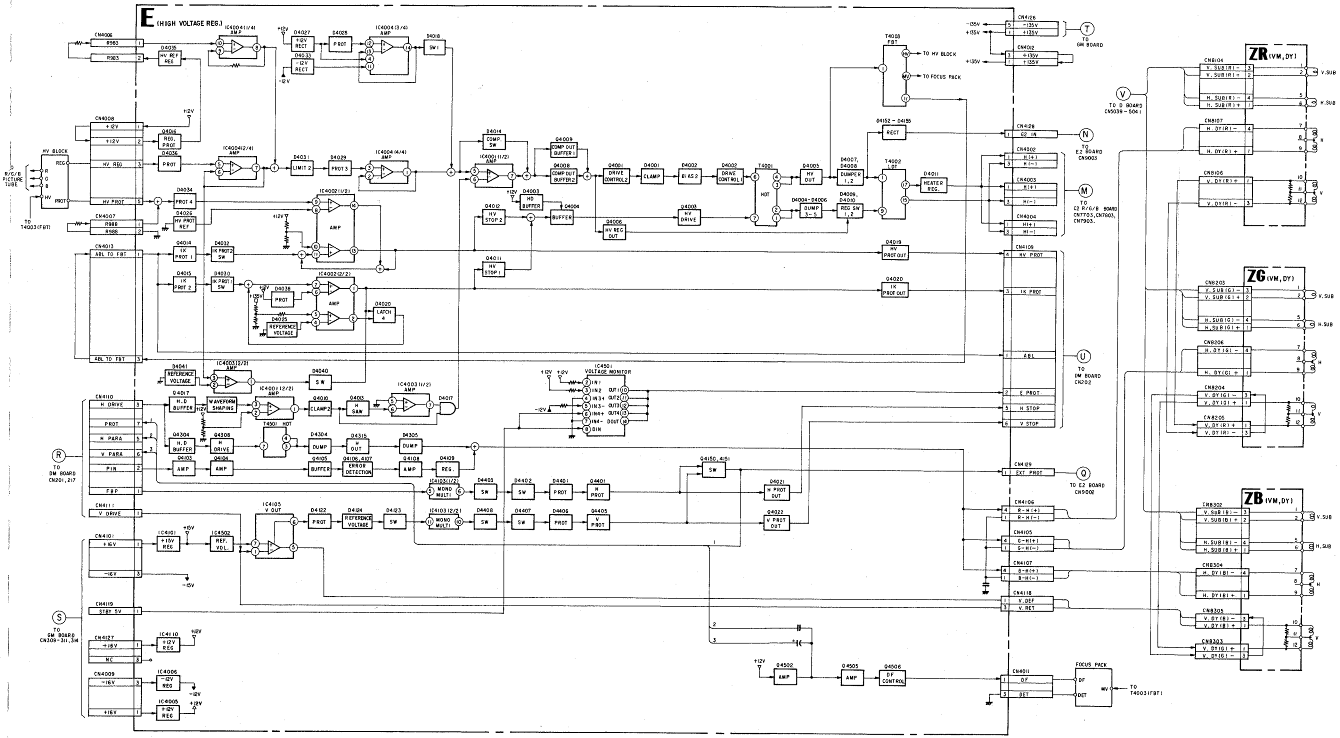
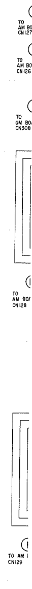

D2 (CONVERGENCE CORRECTION WAVEFORM CONVERTER)
IC5750 CONVERGENCE CORRECTION WAVEFORM CONVERTER
D1G (CONVERGENCE CORRECTION WAVEFORM CONVERTER)
IC5601 CONVERGENCE CORRECTION WAVEFORM CONVERTER
D1B (CONVERGENCE CORRECTION WAVEFORM CONVERTER)
IC5602 CONVERGENCE CORRECTION WAVEFORM CONVERTER
IC5751 CONVERGENCE CORRECTION WAVEFORM CONVERTER
D3
IC5065 SUB OUT(SW)
SUB OUT SW
IC5052 SUB AMP
IC5051 SUB AMP
IC5047 R-H BUFF
IC5049 G-H BUFF
IC5049 B-H BUFF
IC5047 B-V BUFF
IC5045 G-V BUFF
IC5045 R-V BUFF
D5008 CLAMP
Q5046 POWER ON RESET
Q5047 INV.
CN5038
CN5800
CN5041
CN5040
CN5039
CN5037
TO ZR BOARD CN8104
ZG BOARD CN8203
ZB BOARD CN8302

C1, C2R, C2G, C2B, E, E2, ZR, ZG, ZB


E (HIGH VOLTAGE REG.)
CN4006
R983
D4035 HV REF REG
IC4004(1/4) AMP
D4027 +12V RECT
D4033 -12V RECT
D4028 PROT
IC4004(3/4) AMP
D4018 SW1
T4003 FBT
TO HV BLOCK
TO FOCUS PACK
CN4126 -135V +135V
CN4012 +135V +135V
T TO GM BOARD
CN4008 +12V +12V HV REG HV PROT
HV BLOCK REG PROT
R/G/B PICTURE TUBE
Q4016 REG. PROT
D4036 PROT
IC4004(2/4) AMP
D4031 LIMIT 2
D4029 PROT 3
IC4004(4/4) AMP
D4014 COMP. SW
IC4001(1/2) AMP
Q4009 COMP OUT BUFFER 1
Q4008 COMP OUT BUFFER 2
Q4001 DRIVE CONTROL 2
D4001 CLAMP
D4002 BIAS 2
Q4002 DRIVE CONTROL 1
T4001 HDT
Q4005 HV OUT
D4007, D4008 DUMPER 1, 2
T4002 LOT
D4011 HEATER REG.
D4152 - D4155 RECT
CN4128 G2 IN
N TO E2 BOARD CN9003
CN4002 H(+) H(-)
CN4003 H(+) H(-)
CN4004 H(+) H(-)
M TO C2 R/G/B BOARD CN7703, CN7803, CN7903.
D4034 PROT 4
D4026 HV PROT REF
CN4007 R988 R986
TO T4003 (FBT)
IC4002(1/2) AMP
Q4012 HV STOP 2
D4003 HD BUFFER
D4004 BUFFER
Q4006 HV REG OUT
Q4003 HV DRIVE
D4004-D4006 DUMP 3-5
D4009, D4010 REG SW 1, 2
CN4013 ABL TO FBT
Q4014 IK PROT 1
D4032 IK PROT2 SW
Q4019 HV PROT OUT
CN4109 HV PROT IK PROT ABL E PROT H STOP V STOP
Q4015 IK PROT 2
D4030 IK PROT1 SW
D4038 PROT
D4025 REFERENCE VOLTAGE
IC4002(2/2) AMP
D4020 LATCH 4
Q4011 HV STOP 1
Q4020 IK PROT OUT
U TO DM BOARD CN202
D4041 REFERENCE VOLTAGE
IC4003(2/2) AMP
D4040 SW
IC4501 VOLTAGE MONITOR IN1 IN2 IN3+ IN3- IN4+ IN4- DIN OUT1 OUT2 OUT3 OUT4 DOUT
CN4110 H DRIVE PROT H PARA V PARA PIN FBP
Q4017 H.D BUFFER
WAVEFORM SHAPING
IC4001(2/2) AMP
Q4010 CLAMP2
Q4013 H SAW
IC4003(1/2) AMP
D4017
Q4304 H.D BUFFER
Q4308 H DRIVE
T4501 HDT
D4304 DUMP
Q4315 H OUT
D4305 DUMP
R TO DM BOARD CN201, 217
Q4103 AMP
Q4104 AMP
Q4105 BUFFER
Q4106, 4107 ERROR DETECTION
Q4108 AMP
Q4109 REG.
Q4150, 4151 SW
CN4129 EXT PROT
Q TO E2 BOARD CN9002
IC4103(1/2) MONO MULTI
D4403 SW
D4402 SW
D4401 PROT
Q4401 H PROT
Q4021 H PROT OUT
CN4111 V DRIVE
IC4105 V OUT
Q4122 PROT
D4124 REFERENCE VOLTAGE
D4123 SW
IC4103(2/2) MONO MULTI
D4408 SW
D4407 SW
D4406 PROT
Q4405 V PROT
Q4022 V PROT OUT
CN4106 R-H(+) R-H(-)
CN4105 G-H(+) G-H(-)
CN4107 B-H(+) B-H(-)
CN4118 V.DEF V.RET
CN4101 +16V -16V
IC4101 +15V REG
IC4502 REF. VOL.
CN4119 STBY 5V
S TO GM BOARD CN309-311, 314
CN4127 +16V NC
IC4110 +12V REG
CN4009 -16V +16V
IC4006 -12V REG
IC4005 +12V REG
Q4502 AMP
Q4505 AMP
Q4506 DF CONTROL
CN4011 DF DET
FOCUS PACK DF MV DET
TO T4003 (FBT)
V TO D BOARD CN5039 - 5041
ZR (VM, DY)
CN8104 V.SUB(R)- V.SUB(R)+ H.SUB(R)- H.SUB(R)+
CN8107 H.DY(R)- H.DY(R)+
CN8106 V.DY(R)+ V.DY(R)-
V.SUB H.SUB H V
ZG (VM, DY)
CN8203 V.SUB(G)- V.SUB(G)+ H.SUB(G)- H.SUB(G)+
CN8206 H.DY(G)- H.DY(G)+
CN8204 V.DY(G)- V.DY(G)+
CN8205 V.DY(R)+ V.DY(R)-
ZB (VM, DY)
CN8302 V.SUB(B)- V.SUB(B)+ H.SUB(B)- H.SUB(B)+
CN8304 H.DY(B)- H.DY(B)+
CN8305 V.DY(B)- V.DY(B)+
CN8303 V.DY(G)+ V.DY(G)-
+12V -12V +15V -15V +135V -135V


TO AM BO CN127
TO AM BO CN126
TO GM BO CN308
TO AM BO CN128
TO AM I CN129

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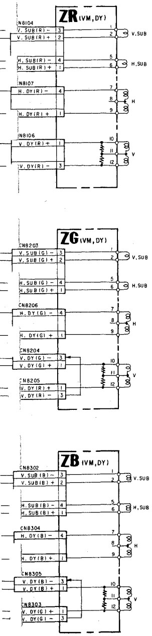
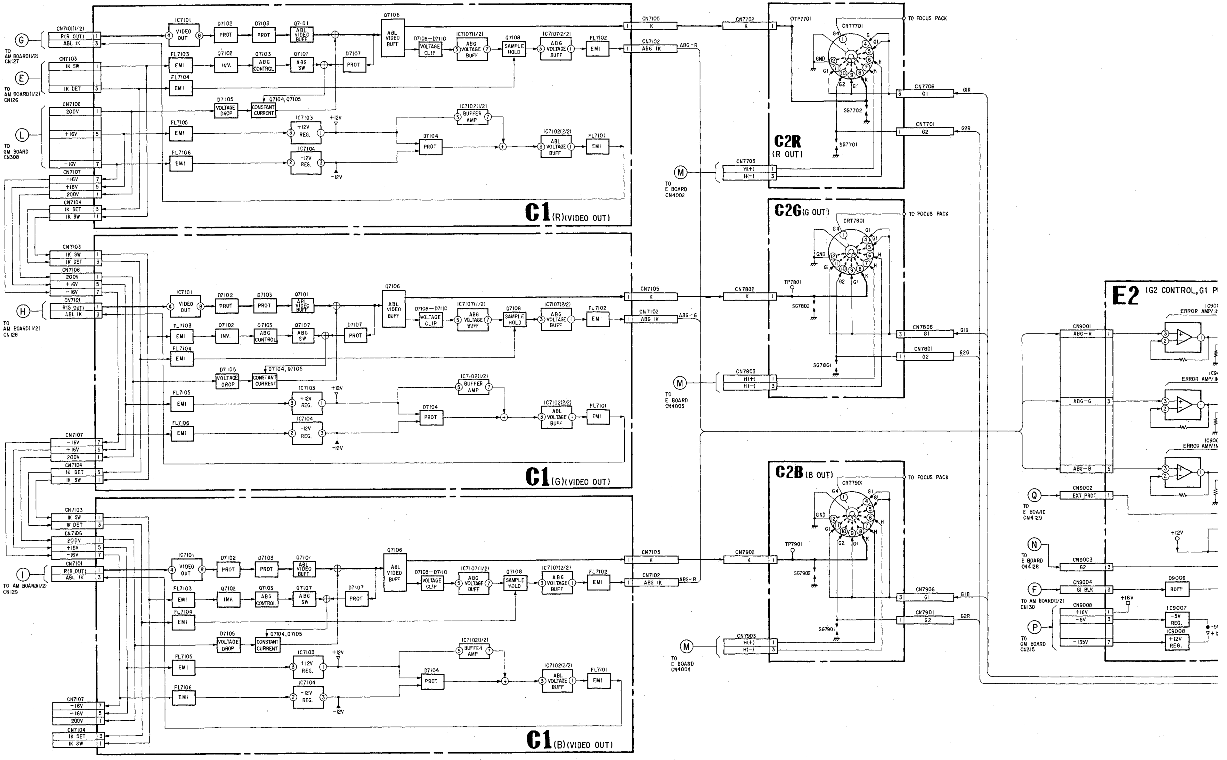
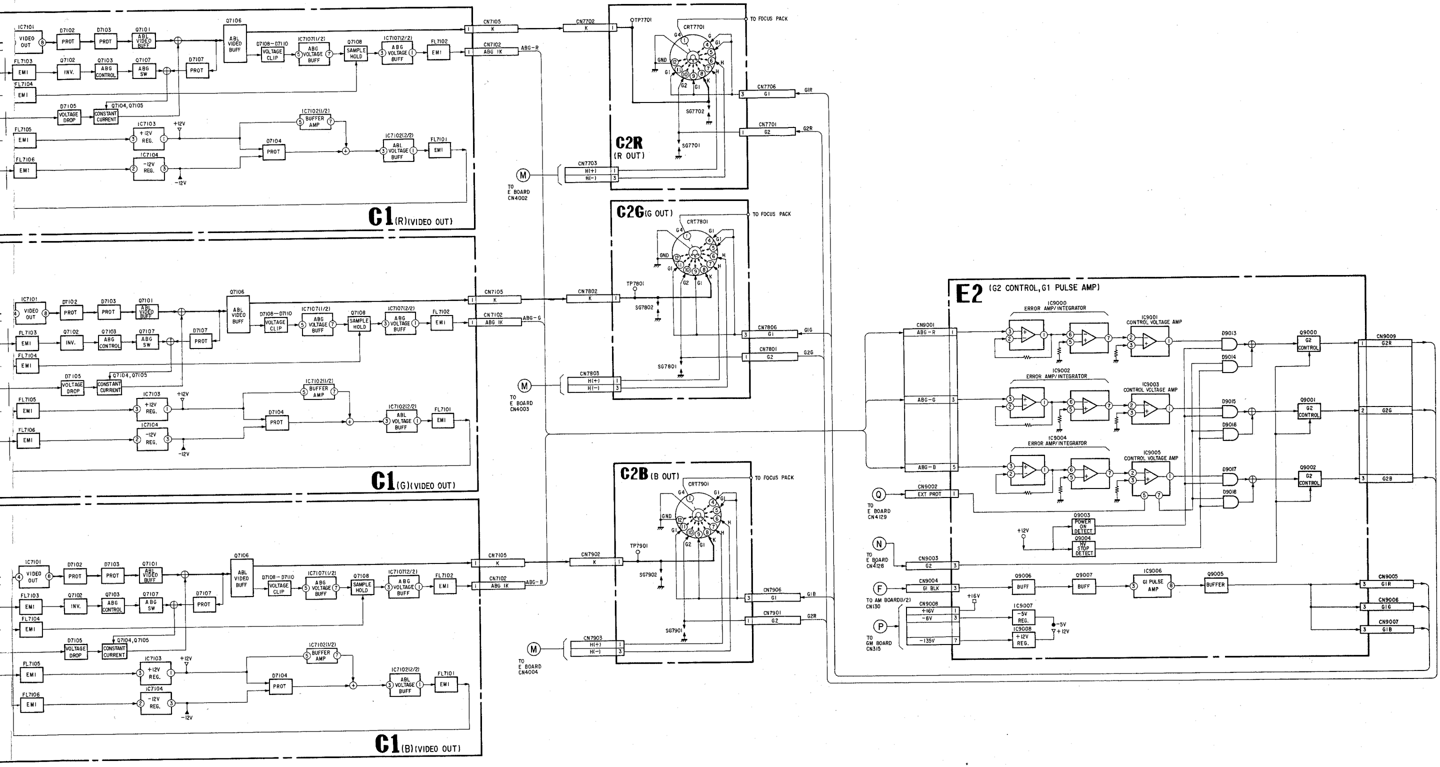
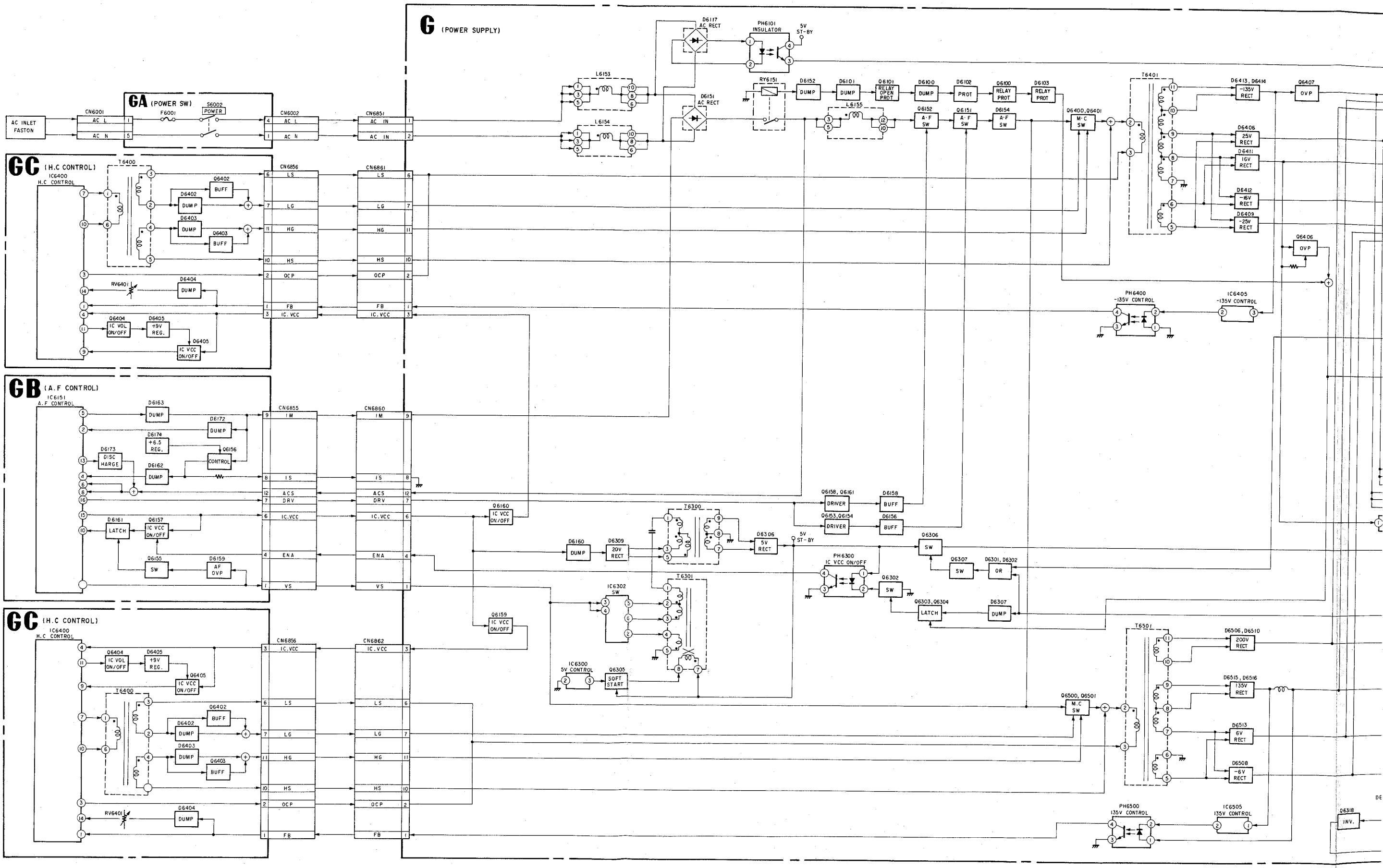

ZR (VM, DY)
CN8104
V.SUB(R) −
V.SUB(R) +
H.SUB(R) −
H.SUB(R) +
CN8107
H.DY(R) −
H.DY(R) +
CN8106
V.DY(R) +
V.DY(R) −
V.SUB
H.SUB
H
V
ZG (VM, DY)
CN8203
V.SUB(G) −
V.SUB(G) +
H.SUB(G) −
H.SUB(G) +
CN8206
H.DY(G) −
H.DY(G) +
CN8204
V.DY(G) −
V.DY(G) +
CN8205
V.DY(R) +
V.DY(R) −
ZB (VM, DY)
CN8302
V.SUB(B) −
V.SUB(B) +
H.SUB(B) −
H.SUB(B) +
CN8304
H.DY(B) −
H.DY(B) +
CN8305
V.DY(B) −
V.DY(B) +
CN8303
V.DY(G) +
V.DY(G) −


G
TO AM BOARD(1/2) CN127
E
TO AM BOARD(1/2) CN126
L
TO GM BOARD CN308
H
TO AM BOARD(1/2) CN128
I
TO AM BOARD(1/2) CN129
CN7101(1/2)
R(R OUT)
ABL IK
CN7103
IK SW
IK DET
CN7106
200V
+16V
−16V
CN7107
CN7104
CN7101
R(G OUT)
R(B OUT)
IC7101
VIDEO OUT
D7102
PROT
D7103
PROT
Q7101
ABL VIDEO BUFF
FL7103
EMI
Q7102
INV.
Q7103
ABG CONTROL
Q7107
ABG SW
D7107
PROT
FL7104
EMI
D7105
VOLTAGE DROP
Q7104, Q7105
CONSTANT CURRENT
FL7105
IC7103
+12V REG.
+12V
FL7106
IC7104
−12V REG.
−12V
Q7106
ABL VIDEO BUFF
D7108−D7110
VOLTAGE CLIP
IC7107(1/2)
ABG VOLTAGE BUFF
Q7108
SAMPLE HOLD
IC7107(2/2)
ABG VOLTAGE BUFF
FL7102
EMI
IC7102(1/2)
BUFFER AMP
D7104
PROT
IC7102(2/2)
ABL VOLTAGE BUFF
FL7101
EMI
CN7105
K
CN7102
ABG IK
ABG−R
ABG−G
ABG−B
C1 (R)(VIDEO OUT)
C1 (G)(VIDEO OUT)
C1 (B)(VIDEO OUT)
C2R (R OUT)
CN7702
K
TP7701
CRT7701
TO FOCUS PACK
G4
G
GND
G1
G2
H
K
SG7702
SG7701
CN7706
G1
G1R
CN7701
G2
G2R
CN7703
H(+)
H(−)
M
TO E BOARD CN4002
C2G (G OUT)
CRT7801
CN7802
TP7801
SG7802
SG7801
CN7806
G1G
CN7801
G2G
CN7803
TO E BOARD CN4003
C2B (B OUT)
CRT7901
CN7902
TP7901
SG7902
SG7901
CN7906
G1B
CN7901
CN7903
TO E BOARD CN4004
E2 (G2 CONTROL, G1 P
CN9001
ABG−R
ABG−G
ABG−B
IC9001
ERROR AMP
CN9002
EXT PROT
Q
TO E BOARD CN4129
N
TO E BOARD CN4126
CN9003
G2
F
TO AM BOARD(1/2) CN130
CN9004
G1 BLK
P
TO GM BOARD CN315
CN9008
+16V
−6V
−135V
+16V
+12V
Q9006
BUFF
IC9007
−5V REG.
IC9008
+12V REG.

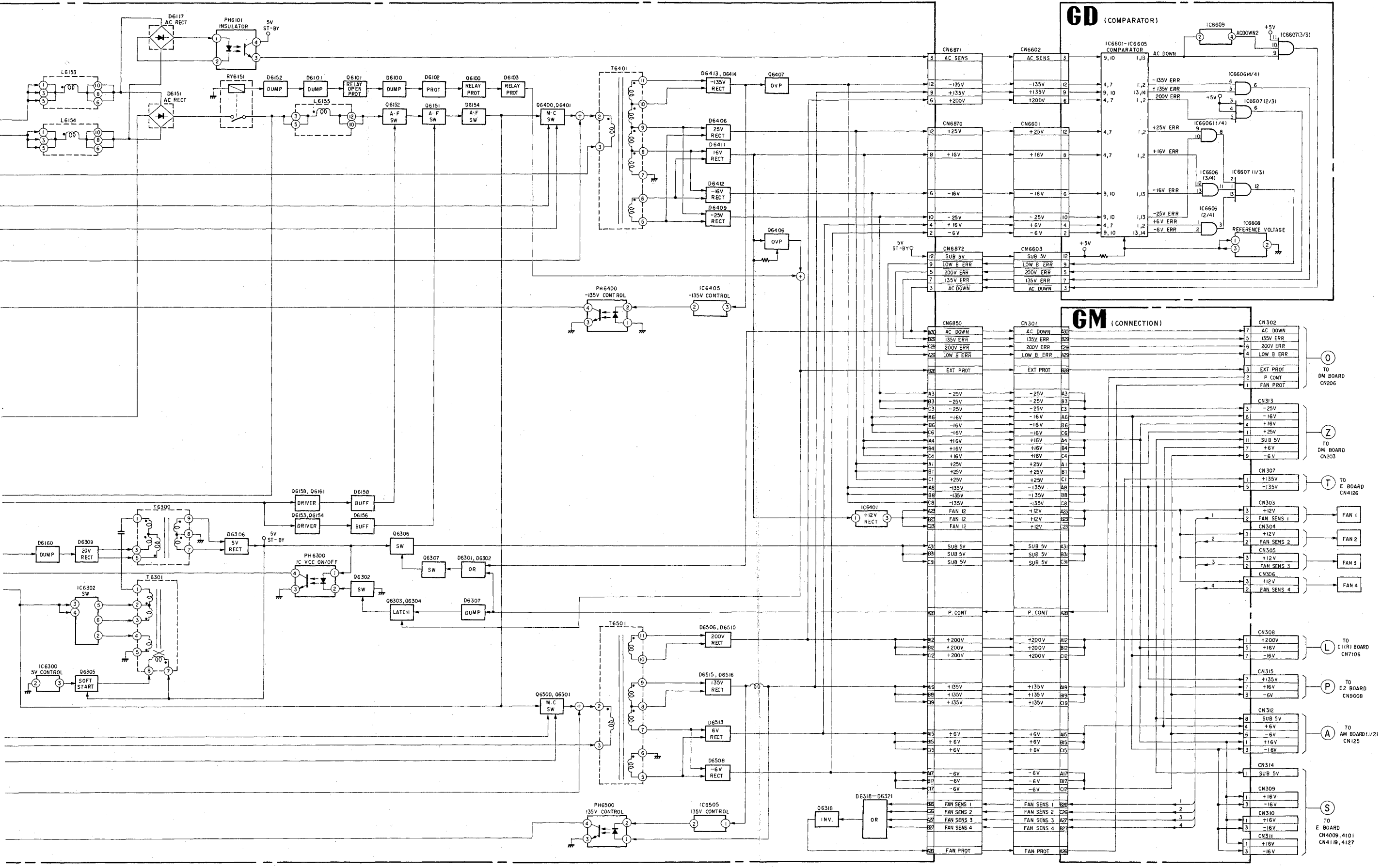

C1(R)(VIDEO OUT)
C1(G)(VIDEO OUT)
C1(B)(VIDEO OUT)
IC7101 VIDEO OUT
D7102 PROT
D7103 PROT
Q7101 ABL VIDEO BUFF
Q7106 ABL VIDEO BUFF
FL7103 EMI
Q7102 INV.
Q7103 ABG CONTROL
Q7107 ABG SW
D7107 PROT
FL7104 EMI
D7105 VOLTAGE DROP
Q7104, Q7105 CONSTANT CURRENT
D7108~D7110 VOLTAGE CLIP
IC7107(1/2) ABG VOLTAGE BUFF
Q7108 SAMPLE HOLD
IC7107(2/2) ABG VOLTAGE BUFF
FL7102 EMI
FL7105 EMI
IC7103 +12V REG.
+12V
IC7102(1/2) BUFFER AMP
D7104 PROT
IC7102(2/2) ABL VOLTAGE BUFF
FL7101 EMI
FL7106 EMI
IC7104 -12V REG.
-12V
CN7105 K
CN7102 ABG IK
ABG-R
ABG-G
ABG-B
C2R (R OUT)
C2G (G OUT)
C2B (B OUT)
CN7702 K
TP7701
CRT7701
TO FOCUS PACK
G4 G G1 GND H K G2
SG7702
SG7701
CN7706 G1
CN7701 G2
G1R
G2R
CN7703 H(+) H(-)
TO E BOARD CN4002
CN7802 K
TP7801
SG7802
CRT7801
CN7806 G1
CN7801 G2
G1G
G2G
SG7801
CN7803 H(+) H(-)
TO E BOARD CN4003
CN7902 K
TP7901
SG7902
CRT7901
CN7906 G1
CN7901 G2
G1B
SG7901
CN7903 H(+) H(-)
TO E BOARD CN4004
E2 (G2 CONTROL, G1 PULSE AMP)
CN9001 ABG-R ABG-G ABG-B
IC9000 ERROR AMP/INTEGRATOR
IC9001 CONTROL VOLTAGE AMP
IC9002 ERROR AMP/INTEGRATOR
IC9003 CONTROL VOLTAGE AMP
IC9004 ERROR AMP/INTEGRATOR
IC9005 CONTROL VOLTAGE AMP
D9013 D9014 D9015 D9016 D9017 D9018
Q9000 G2 CONTROL
Q9001 G2 CONTROL
Q9002 G2 CONTROL
CN9009 G2R G2G G2B
CN9002 EXT PROT
TO E BOARD CN4129
Q9003 POWER ON DETECT
Q9004 HV STOP DETECT
+12V
CN9003 G2
TO E BOARD CN4128
CN9004 G1 BLK
TO AM BOARD(1/2) CN130
Q9006 BUFF
Q9007 BUFF
IC9006 G1 PULSE AMP
Q9005 BUFFER
CN9005 G1R
CN9006 G1G
CN9007 G1B
CN9008 +16V -6V -135V
TO GM BOARD CN315
+16V
IC9007 -5V REG.
IC9008 +12V REG.
-5V
+12V
M Q N F P

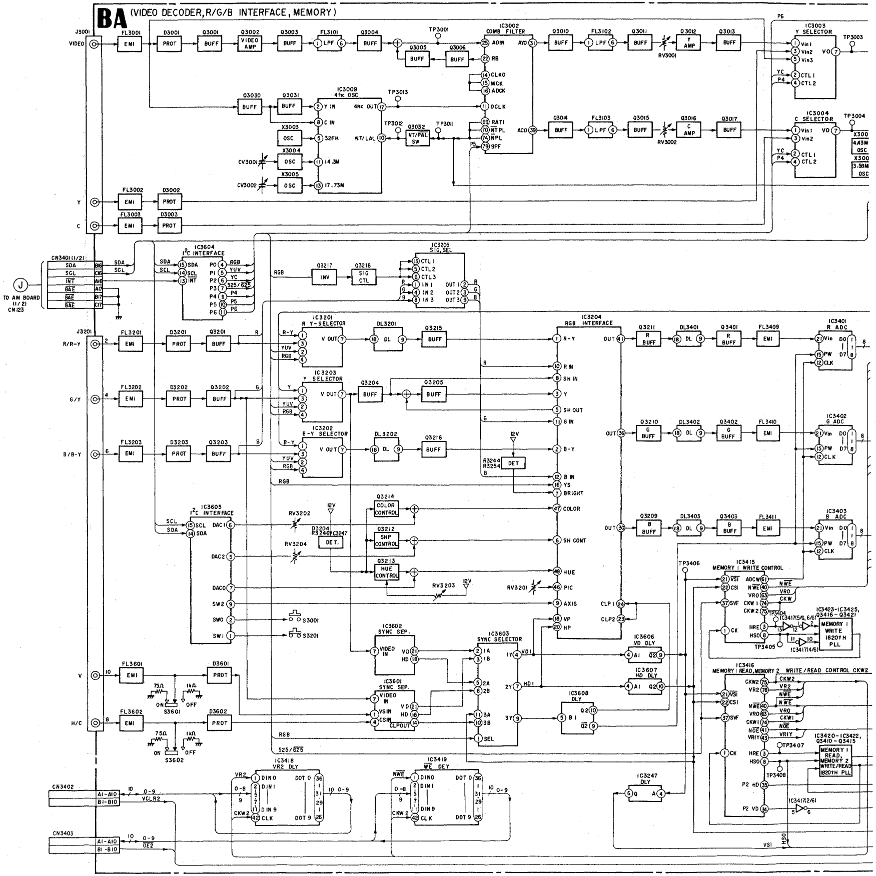
G, GA, GB, GC, GD, GM

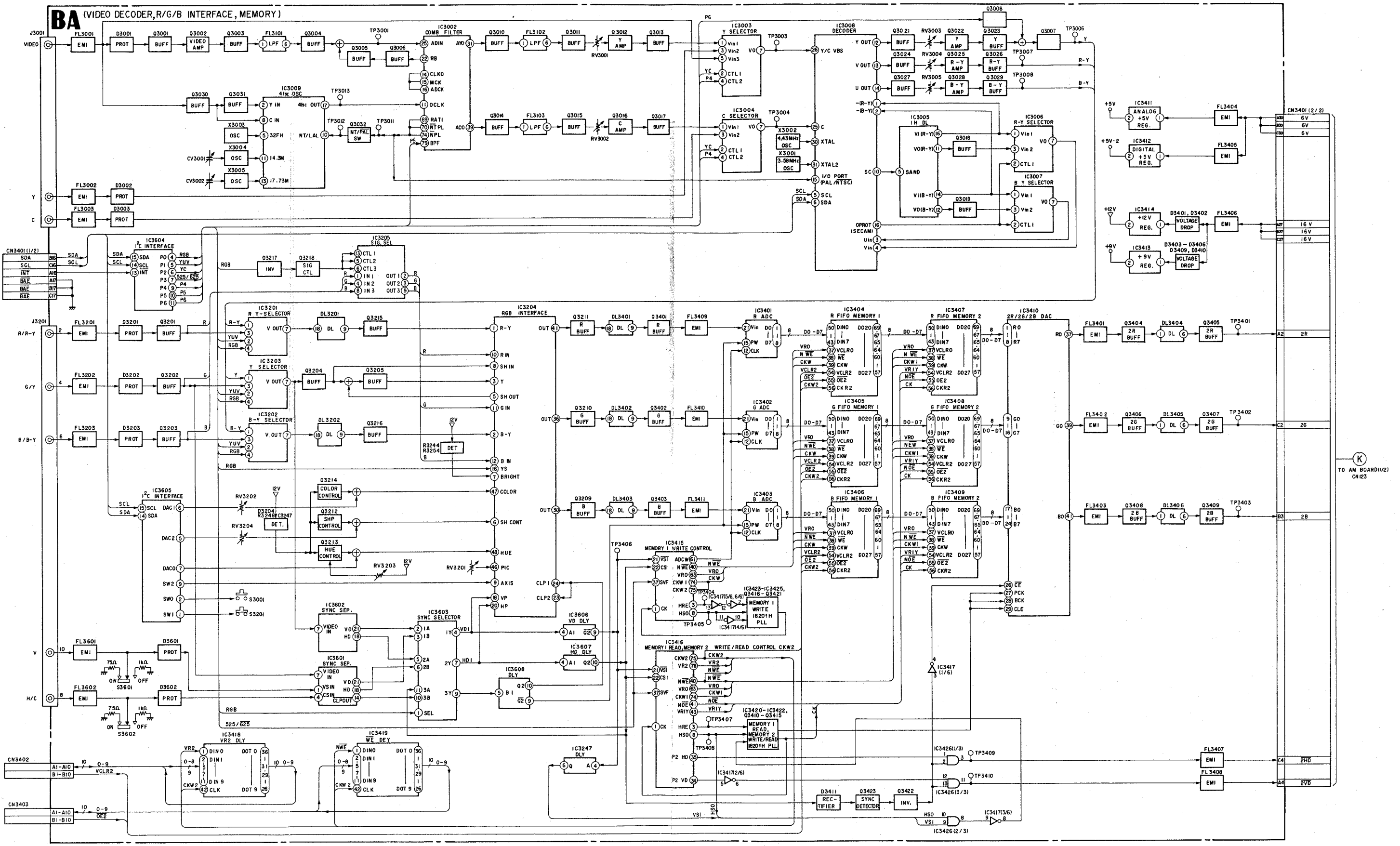


G (POWER SUPPLY)
GA (POWER SW)
GB (A.F CONTROL)
GC (H.C CONTROL)
AC INLET FASTON
CN6001
AC L
AC N
F6001
S6002 POWER
CN6002
CN6851
AC IN
D6117 AC RECT
D6151 AC RECT
PH6101 INSULATOR
5V ST-BY
L6153
L6154
L6155
RY6151
D6152 DUMP
D6101 DUMP
Q6101 RELAY OPEN PROT
D6100 DUMP
D6102 PROT
Q6100 RELAY PROT
D6103 RELAY PROT
Q6152 A·F SW
Q6151 A·F SW
D6154 A·F SW
Q6400, Q6401 M·C SW
T6401
D6413, D6414 -135V RECT
Q6407 OVP
D6406 25V RECT
D6411 16V RECT
D6412 -16V RECT
D6409 -25V RECT
Q6406 OVP
PH6400 -135V CONTROL
IC6405 -135V CONTROL
IC6400 H.C CONTROL
T6400
D6402 DUMP
Q6402 BUFF
D6403 DUMP
Q6403 BUFF
RV6401
D6404 DUMP
Q6404 IC VOL ON/OFF
D6405 +9V REG.
Q6405 IC VCC ON/OFF
CN6856
CN6861
CN6862
LS
LG
HG
HS
OCP
FB
IC.VCC
IC6151 A.F CONTROL
D6163 DUMP
D6172 DUMP
D6174 +6.5 REG.
Q6156 CONTROL
D6173 DISC HARGE
D6162 DUMP
D6161 LATCH
Q6157 IC VCC ON/OFF
Q6155 SW
D6159 AF OVP
CN6855
CN6860
IM
IS
ACS
DRV
ENA
VS
Q6160 IC VCC ON/OFF
Q6159 IC VCC ON/OFF
Q6158, Q6161 DRIVER
Q6153, Q6154 DRIVER
D6158 BUFF
D6156 BUFF
T6300
D6160 DUMP
D6309 20V RECT
D6306 5V RECT
5V ST-BY
Q6306 SW
PH6300 IC VCC ON/OFF
Q6307 SW
D6301, D6302 OR
Q6302 SW
Q6303, Q6304 LATCH
D6307 DUMP
IC6302 SW
T6301
IC6300 5V CONTROL
Q6305 SOFT START
Q6500, Q6501 M.C SW
T6501
D6506, D6510 200V RECT
D6515, D6516 135V RECT
D6513 6V RECT
D6508 -6V RECT
PH6500 135V CONTROL
IC6505 135V CONTROL
Q6318 INV.

9-5

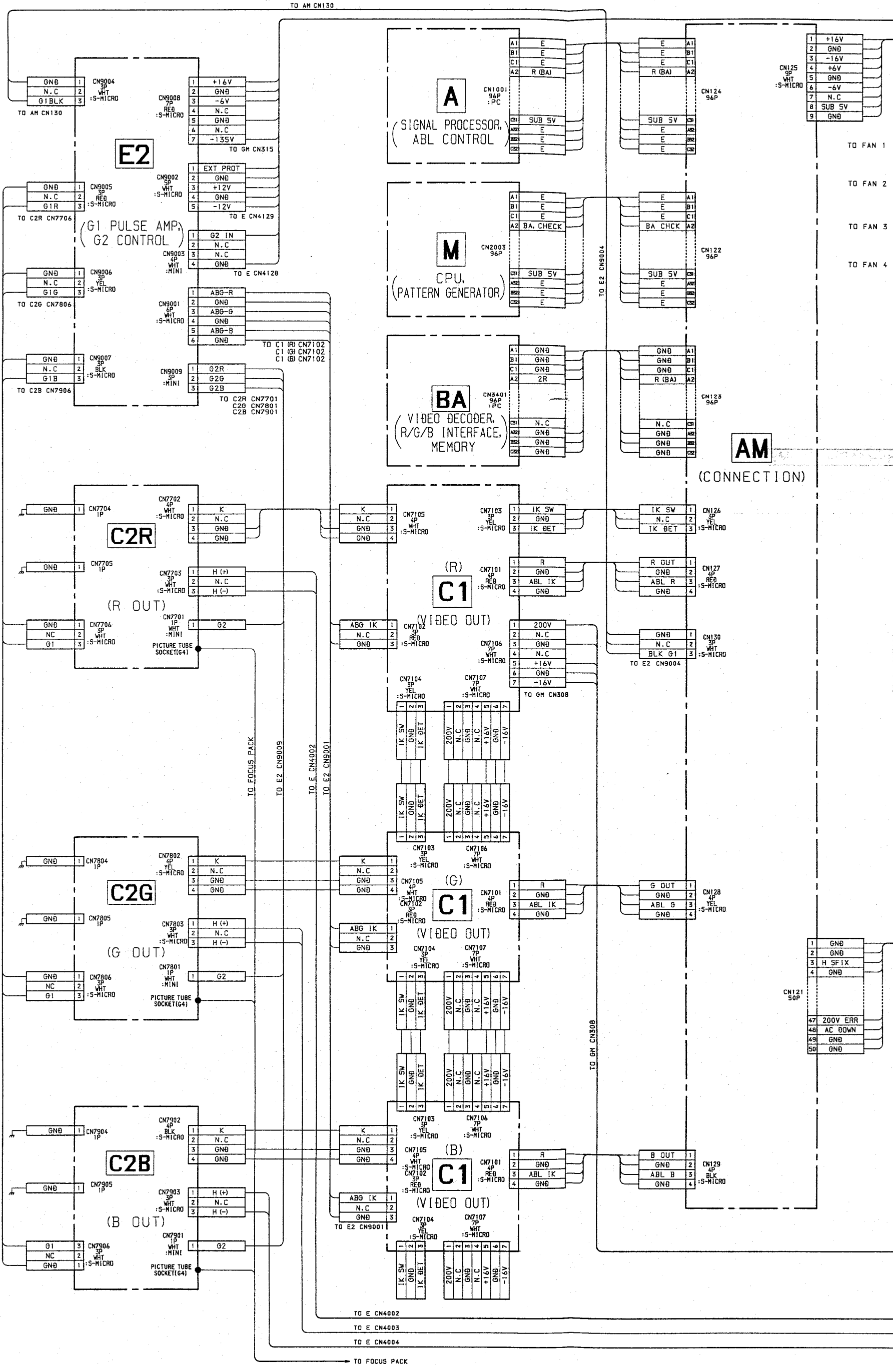

D6117 AC RECT
PH6101 INSULATOR
5V ST-BY
L6153
L6154
D6151 AC RECT
RY6151
D6152 DUMP
D6101 DUMP
Q6101 RELAY OPEN PROT
D6100 DUMP
D6102 PROT
Q6100 RELAY PROT
D6103 RELAY PROT
L6155
Q6152 A-F SW
Q6151 A-F SW
D6154 A-F SW
Q6400, Q6401 M-C SW
T6401
D6413, D6414 -135V RECT
Q6407 OVP
D6406 25V RECT
D6411 16V RECT
D6412 -16V RECT
D6409 -25V RECT
Q6406 OVP
PH6400 -135V CONTROL
IC6405 -135V CONTROL
GD (COMPARATOR)
IC6609
ACDOWN2
IC6607(3/3)
IC6601-IC6605 COMPARATOR
AC DOWN
-135V ERR
+135V ERR
200V ERR
IC6606(4/4)
IC6607(2/3)
IC6606(1/4)
+25V ERR
+16V ERR
IC6606 (3/4)
IC6607 (1/3)
-16V ERR
IC6606 (2/4)
-25V ERR
+6V ERR
-6V ERR
IC6608 REFERENCE VOLTAGE
CN6871
CN6602
AC SENS
-135V
+135V
+200V
CN6870
CN6601
+25V
+16V
-16V
-25V
+6V
-6V
CN6872
CN6603
SUB 5V
LOW B ERR
200V ERR
135V ERR
AC DOWN
GM (CONNECTION)
CN6850
CN301
CN302
135V ERR
EXT PROT
P CONT
FAN PROT
O TO DM BOARD CN206
CN313
Z TO DM BOARD CN203
CN307
+135V
-135V
T TO E BOARD CN4126
IC6401 +12V RECT
FAN 12
+12V
CN303
FAN SENS 1
FAN 1
CN304
FAN SENS 2
FAN 2
CN305
FAN SENS 3
FAN 3
CN306
FAN SENS 4
FAN 4
P. CONT
CN308
+200V
L TO C1(R) BOARD CN7106
CN315
P TO E2 BOARD CN9008
CN312
A TO AM BOARD(1/2) CN125
CN314
CN309
CN310
CN311
S TO E BOARD CN4009, 4101 CN4119, 4127
D6318 INV.
D6318-D6321 OR
T6300
D6160 DUMP
D6309 20V RECT
D6306 5V RECT
5V ST-BY
Q6158, Q6161 DRIVER
Q6153, Q6154 DRIVER
D6158 BUFF
D6156 BUFF
Q6306 SW
Q6307 SW
D6301, D6302 OR
PH6300 IC VCC ON/OFF
Q6302 SW
Q6303, Q6304 LATCH
D6307 DUMP
T6301
IC6302 SW
IC6300 5V CONTROL
Q6305 SOFT START
T6501
D6506, D6510 200V RECT
D6515, D6516 135V RECT
D6513 6V RECT
D6508 -6V RECT
Q6500, Q6501 M-C SW
PH6500 135V CONTROL
IC6505 135V CONTROL

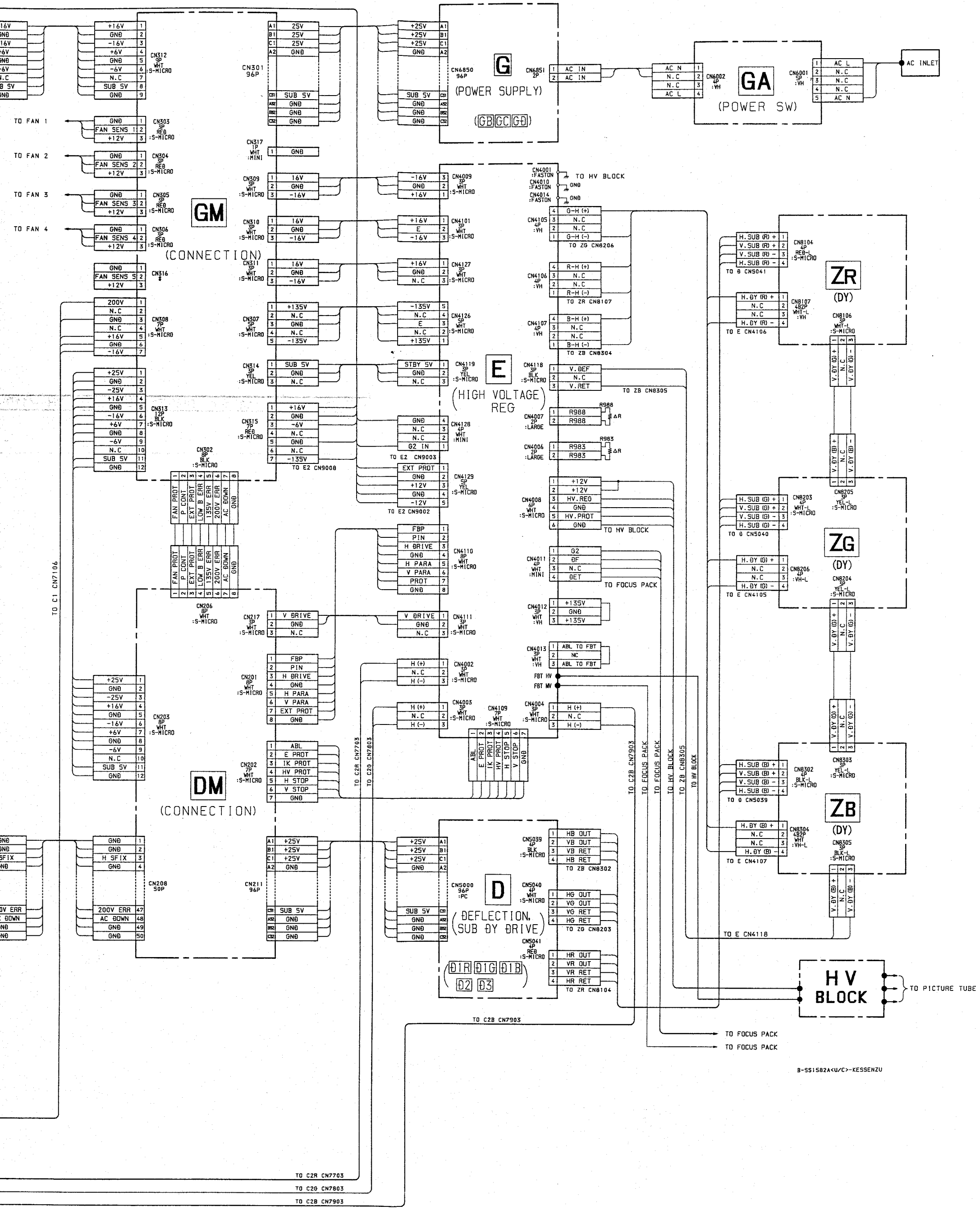

BA
(VIDEO DECODER, R/G/B INTERFACE, MEMORY)
J3001
VIDEO
FL3001
EMI
D3001
PROT
Q3001
BUFF
Q3002
VIDEO AMP
Q3003
BUFF
FL3101
LPF
Q3004
BUFF
Q3005
BUFF
Q3006
BUFF
TP3001
IC3002
COMB FILTER
ADIN
AYD
RB
CLKO
MCK
ADCK
OCLK
RAT1
NT PL
NPL
BPF
ACO
Q3010
BUFF
FL3102
LPF
Q3011
BUFF
Q3012
Y AMP
RV3001
Q3013
BUFF
IC3003
Y SELECTOR
Vin1
Vin2
Vin3
CTL1
CTL2
VO
TP3003
P6
YC
P4
Q3030
BUFF
Q3031
BUFF
IC3009
4fsc OSC
Y IN
C IN
32FH
14.3M
17.73M
4fsc OUT
NT/LAL
TP3013
TP3012
Q3032
NT/PAL SW
TP3011
P5
X3003
OSC
X3004
OSC
X3005
OSC
CV3001
CV3002
Q3014
BUFF
FL3103
LPF
Q3015
BUFF
Q3016
C AMP
RV3002
Q3017
BUFF
IC3004
C SELECTOR
TP3004
X3006
4.43M OSC
X3007
3.58M OSC
Y
FL3002
EMI
D3002
PROT
C
FL3003
EMI
D3003
PROT
CN3401 (1/2)
SDA
SCL
INT
BAE
TO AM BOARD (1/2) CN123
IC3604
I²C INTERFACE
P0
P1
P2
P3
P4
P5
P6
RGB
YUV
YC
525/625
IC3205
SIG. SEL
CTL1
CTL2
CTL3
IN1
IN2
IN3
OUT1
OUT2
OUT3
Q3217
INV
Q3218
SIG CTL
J3201
R/R-Y
G/Y
B/B-Y
FL3201
FL3202
FL3203
D3201
D3202
D3203
Q3201
Q3202
Q3203
IC3201
R-Y SELECTOR
IC3203
Y SELECTOR
IC3202
B-Y SELECTOR
V OUT
DL3201
DL3202
DL
Q3204
Q3205
Q3215
Q3216
BUFF
DET
12V
R3244
R3254
IC3204
RGB INTERFACE
R-Y
R IN
SH IN
SH OUT
G IN
B-Y
B IN
YS
BRIGHT
COLOR
SH CONT
HUE
PIC
AXIS
VP
HP
CLP1
CLP2
OUT
Q3211
R BUFF
Q3210
G BUFF
Q3209
B BUFF
DL3401
DL3402
DL3403
Q3401
R BUFF
Q3402
G BUFF
Q3403
B BUFF
FL3409
FL3410
FL3411
EMI
IC3401
R ADC
IC3402
G ADC
IC3403
B ADC
Vin
PW
CLK
D0
D7
IC3605
I²C INTERFACE
DAC1
DAC2
DAC0
SW2
SW0
SW1
RV3202
D3204
R3246
C3247
DET.
RV3204
Q3214
COLOR CONTROL
Q3212
SHP CONTROL
Q3213
HUE CONTROL
RV3203
RV3201
S3001
S3201
IC3602
SYNC SEP.
VIDEO IN
VD
HD
IC3601
SYNC SEP.
VSIN
CSIN
CLPOUT
IC3603
SYNC SELECTOR
1A
1B
2A
2B
3A
3B
SEL
1Y
2Y
3Y
VD1
HD1
IC3606
VD DLY
IC3607
HD DLY
IC3608
DLY
TP3406
IC3415
MEMORY 1 WRITE CONTROL
VSI
CSI
SVF
CK
ADCW
NWE
VRO
CKW1
CKW2
HRE
HSO
TP3404
TP3405
IC3417
IC3423-IC3425, Q3416-Q3421
MEMORY 1 WRITE 1820fH PLL
IC3416
MEMORY 1 READ, MEMORY 2 WRITE/READ CONTROL
VR2
NOE
VR1Y
TP3407
TP3408
IC3420-IC3422, Q3410-Q3415
MEMORY 1 READ, MEMORY 2 WRITE/READ 1820fH PLL
P2 HD
P2 VD
V
H/C
FL3601
FL3602
D3601
D3602
75Ω
1kΩ
ON
OFF
S3601
S3602
RGB
525/625
CN3402
A1-A10
B1-B10
VCLR2
CN3403
OE2
IC3418
VR2 DLY
DIN0
DIN1
DIN9
DOT0
DOT9
CLK
CKW2
IC3419
WE DLY
IC3247
DLY
VSI
HSO


BA (VIDEO DECODER, R/G/B INTERFACE, MEMORY)
J3001 VIDEO
FL3001 EMI
D3001 PROT
Q3001 BUFF
Q3002 VIDEO AMP
Q3003 BUFF
FL3101 LPF
Q3004 BUFF
Q3005 BUFF
Q3006 BUFF
TP3001
IC3002 COMB FILTER
ADIN
AYO
RB
CLKO
MCK
ADCK
OCLK
RATI
NTPL
NPL
BPF
ACO
Q3010 BUFF
FL3102 LPF
Q3011 BUFF
RV3001
Q3012 Y AMP
Q3013 BUFF
Q3030 BUFF
Q3031 BUFF
IC3009 4fsc OSC
Y IN
C IN
32FH
14.3M
17.73M
4fsc OUT
NT/LAL
X3003 OSC
X3004 OSC
X3005 OSC
CV3001
CV3002
TP3013
TP3012
Q3032 NT/PAL SW
TP3011
Q3014 BUFF
FL3103 LPF
Q3015 BUFF
RV3002
Q3016 C AMP
Q3017 BUFF
P6
P5
IC3003 Y SELECTOR
Vin1
Vin2
Vin3
VO
CTL1
CTL2
YC
P4
TP3003
IC3004 C SELECTOR
TP3004
X3002 4.43MHz OSC
X3001 3.58MHz OSC
IC3008 DECODER
Y/C VBS
C
XTAL
XTAL2
I/O PORT (PAL/NTSC)
SCL
SDA
Y OUT
V OUT
U OUT
-(R-Y)
-(B-Y)
SC
OPROT (SECAM)
Uin
Vin
Q3021 BUFF
RV3003
Q3022 Y AMP
Q3023 Y BUFF
Q3024 BUFF
RV3004
Q3025 R-Y AMP
Q3026 R-Y BUFF
Q3027 BUFF
RV3005
Q3028 B-Y AMP
Q3029 B-Y BUFF
Q3008
Q3007
TP3006
TP3007
TP3008
Y
R-Y
B-Y
IC3005 1H DL
VI(R-Y)
VO(R-Y)
SAND
VI(B-Y)
VO(B-Y)
Q3018 BUFF
Q3019 BUFF
IC3006 R-Y SELECTOR
IC3007 B-Y SELECTOR
Vin1
Vin2
CTL1
VO
+5V
IC3411 ANALOG +5V REG.
+5V-2
IC3412 DIGITAL +5V REG.
+12V
IC3414 +12V REG.
D3401, D3402 VOLTAGE DROP
+9V
IC3413 +9V REG.
D3403-D3406, D3409, D3410 VOLTAGE DROP
FL3404 EMI
FL3405 EMI
FL3406 EMI
CN3401 (2/2)
6V
6V
6V
16V
16V
16V
A30
B30
C30
A27
B27
C27
Y
C
FL3002 EMI
D3002 PROT
FL3003 EMI
D3003 PROT
CN3401 (1/2)
SDA
SCL
INT
BAE
BAE
BAE
B16
C16
A16
A17
B17
C17
J
TO AM BOARD (1/2) CN123
IC3604 I2C INTERFACE
P0 RGB
P1 YUV
P2 YC
P3 525/625
P4
P5
P6
RGB
Q3217 INV
Q3218 SIG CTL
IC3205 SIG. SEL
CTL1
CTL2
CTL3
IN1
IN2
IN3
OUT1
OUT2
OUT3
J3201
R/R-Y
G/Y
B/B-Y
FL3201 EMI
D3201 PROT
Q3201 BUFF
FL3202 EMI
D3202 PROT
Q3202 BUFF
FL3203 EMI
D3203 PROT
Q3203 BUFF
IC3201 R-Y SELECTOR
IC3203 Y SELECTOR
IC3202 B-Y SELECTOR
V OUT
DL3201 DL
DL3202 DL
Q3215 BUFF
Q3204 BUFF
Q3205 BUFF
Q3216 BUFF
12V
R3244 R3254 DET
IC3204 RGB INTERFACE
R-Y
R IN
SH IN
Y
SH OUT
G IN
B-Y
B IN
YS
BRIGHT
COLOR
SH CONT
HUE
PIC
AXIS
VP
HP
CLP1
CLP2
OUT
IC3605 I2C INTERFACE
DAC1
DAC2
DAC0
SW2
SW0
SW1
RV3202
RV3204
D3204 R3248 C3247 DET.
Q3214 COLOR CONTROL
Q3212 SHP CONTROL
Q3213 HUE CONTROL
RV3203
RV3201
S3001
S3201
IC3602 SYNC SEP.
IC3601 SYNC SEP.
VIDEO IN
VD
HD
VSIN
CSIN
CLPOUT
IC3603 SYNC SELECTOR
1A 1B 2A 2B 3A 3B SEL
1Y 2Y 3Y
VD1
HD1
IC3606 VD DLY
IC3607 HD DLY
IC3608 DLY
V
H/C
FL3601 EMI
D3601 PROT
FL3602 EMI
D3602 PROT
75Ω
1kΩ
ON OFF
S3601
S3602
RGB
525/625
Q3211 R BUFF
DL3401 DL
Q3401 R BUFF
FL3409 EMI
Q3210 G BUFF
DL3402 DL
Q3402 G BUFF
FL3410 EMI
Q3209 B BUFF
DL3403 DL
Q3403 B BUFF
FL3411 EMI
IC3401 R ADC
IC3402 G ADC
IC3403 B ADC
Vin
PW
CLK
D0
D7
D0-D7
IC3404 R FIFO MEMORY 1
IC3405 G FIFO MEMORY 1
IC3406 B FIFO MEMORY 1
IC3407 R FIFO MEMORY 2
IC3408 G FIFO MEMORY 2
IC3409 B FIFO MEMORY 2
DIN0
DIN7
VCLR0
WE
CKW
VCLR2
OE2
CKR2
DO20
DO27
VRO
NWE
VCLR2
VR1Y
NOE
CK
IC3410 2R/2G/2B DAC
R0 R7
G0 G7
B0 B7
CE
PCK
BCK
CLE
FL3401 EMI
Q3404 2R BUFF
DL3404 DL
Q3405 2R BUFF
TP3401
FL3402 EMI
Q3406 2G BUFF
DL3405 DL
Q3407 2G BUFF
TP3402
FL3403 EMI
Q3408 2B BUFF
DL3406 DL
Q3409 2B BUFF
TP3403
2R
2G
2B
A2
C2
B3
K
TO AM BOARD (1/2) CN123
TP3406
IC3415 MEMORY 1 WRITE CONTROL
VST
CSI
SVF
ADCW
NWE
VRO
CKW
CKW2
CK
HRE
HSO
TP3404
TP3405
IC3417 (5/6, 6/6)
IC3417 (4/6)
IC3423-IC3425, Q3416-Q3421 MEMORY 1 WRITE 1820FH PLL
IC3416 MEMORY 1 READ, MEMORY 2 WRITE/READ CONTROL
CKW2
VR2
NWE
VRO
CKW1
NOE
VR1Y
IC3420-IC3422, Q3410-Q3415 MEMORY 1 READ, MEMORY 2 WRITE/READ 1820FH PLL
TP3407
TP3408
P2 HD
P2 VD
IC3417 (2/6)
IC3417 (1/6)
IC3247 DLY
IC3426 (1/3)
IC3426 (3/3)
IC3426 (2/3)
IC3417 (3/6)
TP3409
TP3410
D3411 RECTIFIER
Q3423 SYNC DETECTOR
Q3422 INV.
HSO
VSI
FL3407 EMI
FL3408 EMI
2HD
2VD
C4
A4
CN3402
A1-A10
B1-B10
VCLR2
CN3403
OE2
0-9
IC3418 VR2 DLY
IC3419 WE DLY
DIN0
DIN1
DIN9
DOT0
DOT9
CLK
CKW2
VR2
NWE

SECTION 10
DIAGRAMS

10-1. FRAME SCHEMATIC DIAGRAM


TO AM CN130
E2
(G1 PULSE AMP, G2 CONTROL)
CN9004 3P WHT :S-MICRO
GND
N.C
G1BLK
CN9008 7P RED :S-MICRO
+16V
GND
-6V
N.C
GND
N.C
-135V
TO GM CN315
CN9002 5P WHT :S-MICRO
EXT PROT
GND
+12V
GND
-12V
TO E CN4129
CN9005 3P RED :S-MICRO
G1R
TO C2R CN7706
CN9003 4P WHT :MINI
G2 IN
N.C
N.C
GND
TO E CN4128
CN9006 3P YEL :S-MICRO
G1G
TO C2G CN7806
CN9001 6P WHT :S-MICRO
ABG-R
ABG-G
ABG-B
TO C1 (R) CN7102
C1 (G) CN7102
C1 (B) CN7102
CN9007 3P BLK :S-MICRO
G1B
TO C2B CN7906
CN9009 3P :MINI
G2R
G2G
G2B
TO C2R CN7701
C2G CN7801
C2B CN7901
A
(SIGNAL PROCESSOR, ABL CONTROL)
CN1001 96P :PC
E
R (BA)
SUB 5V
M
(CPU, PATTERN GENERATOR)
CN2003 96P
BA. CHECK
BA
(VIDEO DECODER, R/G/B INTERFACE, MEMORY)
CN3401 96P :PC
2R
AM
(CONNECTION)
CN124 96P
CN122 96P
CN123 96P
BA CHCK
TO E2 CN9004
CN125 9P WHT :S-MICRO
+16V
GND
-16V
+6V
GND
-6V
N.C
SUB 5V
GND
TO FAN 1
TO FAN 2
TO FAN 3
TO FAN 4
C2R
(R OUT)
CN7704 1P
CN7705 1P
CN7702 4P WHT :S-MICRO
K
N.C
GND
CN7703 3P WHT :S-MICRO
H (+)
H (-)
CN7706 5P WHT :S-MICRO
NC
G1
CN7701 1P WHT :MINI
G2
PICTURE TUBE SOCKET(G4)
C1
(R)
(VIDEO OUT)
CN7105 4P WHT :S-MICRO
CN7102 3P RED :S-MICRO
ABG IK
CN7103 3P YEL :S-MICRO
IK SW
IK DET
CN7101 4P RED :S-MICRO
R
ABL IK
CN7106 7P WHT :S-MICRO
200V
+16V
-16V
TO GM CN308
CN7104 3P YEL :S-MICRO
CN7107 7P WHT :S-MICRO
CN126 3P YEL :S-MICRO
CN127 4P RED :S-MICRO
R OUT
ABL R
CN130 3P WHT :S-MICRO
BLK G1
TO E2 CN9004
TO FOCUS PACK
TO E2 CN9009
TO E CN4002
TO E2 CN9001
C2G
(G OUT)
CN7804 1P
CN7805 1P
CN7802 4P YEL :S-MICRO
CN7803 3P WHT :S-MICRO
CN7806 3P WHT :S-MICRO
CN7801 1P WHT :MINI
(G)
CN128 4P YEL :S-MICRO
G OUT
ABL G
CN121 50P
H SFIX
200V ERR
AC DOWN
TO GM CN308
C2B
(B OUT)
CN7904 1P
CN7905 1P
CN7902 4P BLK :S-MICRO
CN7903 3P WHT :S-MICRO
CN7906 3P WHT :S-MICRO
CN7901 1P WHT :MINI
(B)
TO E2 CN9001
CN129 4P BLK :S-MICRO
B OUT
ABL B
TO E CN4002
TO E CN4003
TO E CN4004
TO FOCUS PACK


GM
(CONNECTION)
CN301 96P
CN312 9P WHT :S-MICRO
CN303 3P RED :S-MICRO
CN304 3P RED :S-MICRO
CN305 3P RED :S-MICRO
CN306 3P RED :S-MICRO
CN316
CN308 7P WHT :S-MICRO
CN313 12P BLK :S-MICRO
CN302 8P BLK :S-MICRO
CN317 1P WHT :MINI
CN309 3P WHT :S-MICRO
CN310 3P WHT :S-MICRO
CN311 3P WHT :S-MICRO
CN307 5P WHT :S-MICRO
CN314 3P YEL :S-MICRO
CN315 7P RED :S-MICRO
TO FAN 1
TO FAN 2
TO FAN 3
TO FAN 4
+16V
GND
-16V
+6V
-6V
N.C
SUB 5V
FAN SENS 1
FAN SENS 2
FAN SENS 3
FAN SENS 4
FAN SENS 5
+12V
200V
+25V
-25V
25V
+135V
-135V
FAN PROT
P CONT
EXT PROT
LOW B ERR
135V ERR
200V ERR
AC DOWN
DM
(CONNECTION)
CN206 8P WHT :S-MICRO
CN203 8P WHT :S-MICRO
CN217 3P WHT :S-MICRO
CN201 8P WHT :S-MICRO
CN202 7P WHT :S-MICRO
CN208 50P
CN211 96P
V DRIVE
FBP
PIN
H DRIVE
H PARA
V PARA
ABL
E PROT
IK PROT
HV PROT
H STOP
V STOP
H SFIX
TO C1 CN7106
TO C2R CN7703
TO C2G CN7803
TO C2B CN7903
G
(POWER SUPPLY)
(GB GC GD)
CN6850 96P
CN6851 2P
AC IN
GA
(POWER SW)
CN6002 4P :VH
CN6001 5P :VH
AC N
AC L
AC INLET
E
(HIGH VOLTAGE REG)
CN4009 3P WHT :S-MICRO
CN4101 3P WHT :S-MICRO
CN4127 3P WHT :S-MICRO
CN4126 5P WHT :S-MICRO
CN4119 3P YEL :S-MICRO
CN4128 4P WHT :MINI
G2 IN
TO E2 CN9003
TO E2 CN9008
CN4129 5P YEL :S-MICRO
TO E2 CN9002
STBY 5V
CN4110 8P WHT :S-MICRO
PROT
CN4111 3P WHT :S-MICRO
CN4002 3P WHT :S-MICRO
CN4003 3P WHT :S-MICRO
CN4109 7P WHT :S-MICRO
CN4004 3P WHT :S-MICRO
H (+)
H (-)
CN4001 :FASTON
CN4010 :FASTON
CN4014 :FASTON
TO HV BLOCK
CN4105 4P :VH
G-H (+)
G-H (-)
TO ZG CN8206
CN4106 4P :VH
R-H (+)
R-H (-)
TO ZR CN8107
CN4107 4P :VH
B-H (+)
B-H (-)
TO ZB CN8304
CN4118 3P BLK :S-MICRO
V.DEF
V.RET
TO ZB CN8305
CN4007 2P :LARGE
R988
ΔR
CN4006 2P :LARGE
R983
CN4008 6P WHT :S-MICRO
HV.REG
HV.PROT
CN4011 4P WHT :MINI
G2
DF
DET
TO FOCUS PACK
CN4012 3P WHT :VH
CN4013 3P WHT :VH
ABL TO FBT
NC
FBT HV
FBT MV
TO C2B CN7903
TO FOCUS PACK
TO HV BLOCK
TO ZB CN8305
D
(DEFLECTION, SUB DY DRIVE)
(D1R D1G D1B D2 D3)
CN5000 96P :PC
CN5039 4P BLK :S-MICRO
HB OUT
VB OUT
VB RET
HB RET
TO ZB CN8302
CN5040 4P WHT :S-MICRO
HG OUT
VG OUT
VG RET
HG RET
TO ZG CN8203
CN5041 4P RED :S-MICRO
HR OUT
VR OUT
VR RET
HR RET
TO ZR CN8104
ZR
(DY)
CN8104 4P RED-L :S-MICRO
H.SUB (R) +
V.SUB (R) +
V.SUB (R) -
H.SUB (R) -
TO D CN5041
CN8107 4P WHT-L :VH
H.DY (R) +
H.DY (R) -
TO E CN4106
CN8106 3P WHT-L :S-MICRO
V.DY (G) +
V.DY (G) -
V.DY (B) +
V.DY (B) -
ZG
(DY)
CN8205 3P YEL-L :S-MICRO
CN8203 4P WHT-L :S-MICRO
H.SUB (G) +
V.SUB (G) +
V.SUB (G) -
H.SUB (G) -
TO D CN5040
CN8206 4P :VH-L
H.DY (G) +
H.DY (G) -
TO E CN4105
CN8204 3P YEL-L :S-MICRO
ZB
(DY)
CN8303 3P YEL-L :S-MICRO
CN8302 4P BLK-L :S-MICRO
H.SUB (B) +
V.SUB (B) +
V.SUB (B) -
H.SUB (B) -
TO D CN5039
CN8304 4P WHT :VH-L
H.DY (B) +
H.DY (B) -
TO E CN4107
CN8305 3P BLK-L :S-MICRO
TO E CN4118
HV BLOCK
TO PICTURE TUBE
TO FOCUS PACK
TO FOCUS PACK

B-SS1582A<U/C>-KESSENZU

10-2. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics.
- All electrolytics are in 50V unless otherwise specified.
- All resistors are in ohms, 1/4W in resistance, 1/10W in chip resistance.
  kΩ = 1000Ω, MΩ = 1000kΩ
- : nonflammable resistor.
- : fusible resistor.
- △ : internal component.
- ▭ : panel designation and adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- The components identified by ⧓ in this basic schematic diagram have been carefully factory-selected for each set in order to satisfy requlations regarding X-ray radiation.
  Should replacement be required, replace only with the value originally used.
- When replacing components identified by ◪, make the necessary adjustments indicated. If results do not meet the specified value, change the component identified by ⧓ and repeat the adjustment untill the specified value is achieved.
  (Refer to IC4003, T4002, T4003, R4019 and R4098 adjustment on Page 4-1, 4-2.)
- When replacing the part in below table, be sure to perform the related adjustment.

Part replaced (◪)	Adjustment (⧓)
IC4003, T4002, T4003, D4026, D4031, D4034, D4035, D4036, R4001, R4003, R4005, R4007, R4008, R4009, R4012, R4014, R4015, R4017, R4018, R4019, R4043, R4044, R4046, R4047, R4053, R4062, R4063, R4077, R4078, R4079, R4080, R4081, R4082, R4083, R4084, R4085, R4086, R4087, R4088, R4091, R4092, R4097, R4098, R4100, C4006, C4007, C4008, C4011, C4012, C4049, E MOUNT	+B POWER VOLTAGE HIGH TENSION VOLTAGE HIGH TENSION PROTECTION Ik PROTECTOR +B OVP OPERATION (IC4003, T4002, T4003, R4019, R4098, C4012)

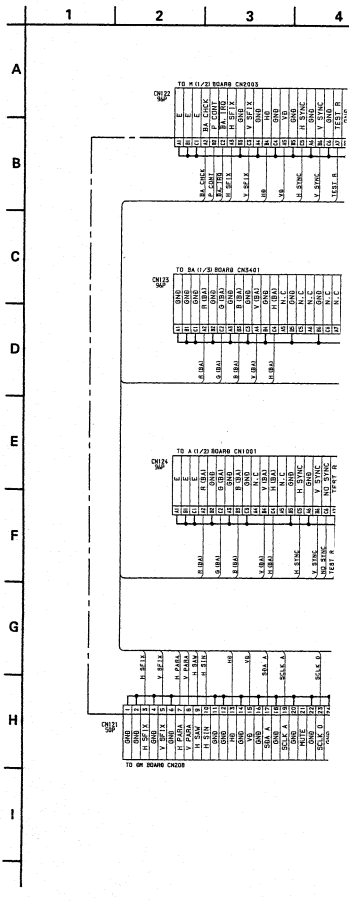
- Voltage value is the reference value between it and the earth, when RGB color bar signal is received from color bar generator (digital multi-meter used : 10M ohms/V DC).
- Unit of voltage values is V (volt).
- * : Measurement disabled.
- Circled numbers are waveform references.
- ⇨ : Signal Path.

Reference information

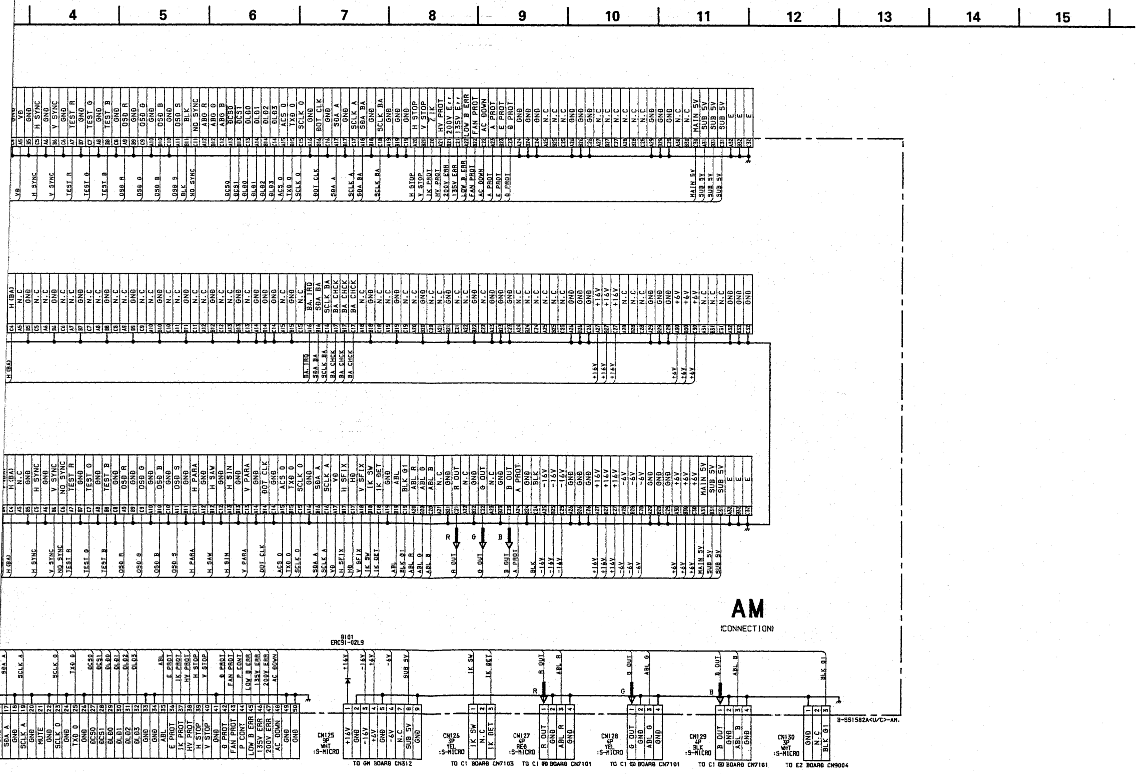
RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFRAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: RW	NONFLAMMABLE WIREWOUND
	:	ADJUSTMENT RESISTOR
COIL	: LF-8L	MICRO INDUCTOR
	※	
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

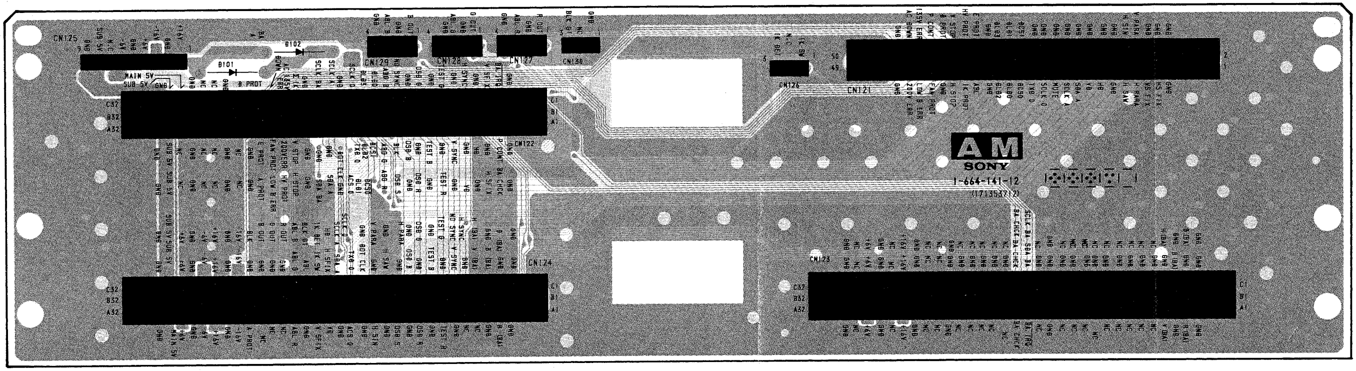
Note: The component identified by mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifies par une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

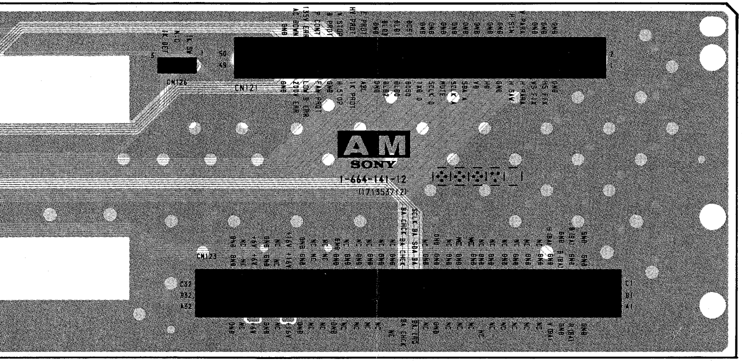


DS/511DMS, CHP-411DM/411DMS


4
5
6
7
8
9
10
11
12
13
14
15
AM
(CONNECTION)
D101
ERC91-02L9
CN125
9P
WHT
:S-MICRO
TO GM BOARD CN312
CN126
3P
YEL
:S-MICRO
TO C1 BOARD CN7103
CN127
4P
RED
:S-MICRO
TO C1 (R) BOARD CN7101
CN128
4P
YEL
:S-MICRO
TO C1 (G) BOARD CN7101
CN129
4P
BLK
:S-MICRO
TO C1 (B) BOARD CN7101
CN130
3P
WHT
:S-MICRO
TO E2 BOARD CN9004
B-SS1582A<U/C>-AM.
R
G
B


CN125
CN129
CN128
CN127
CN130
CN126
CN121
CN122
CN124
CN123
D101
D102
MAIN 5V
SUB 5V
B PROT
C32
B32
A32
C1
B1
A1
50
49
AM
SONY
1-664-141-12

AM -B SIDE-
1-664-141-12

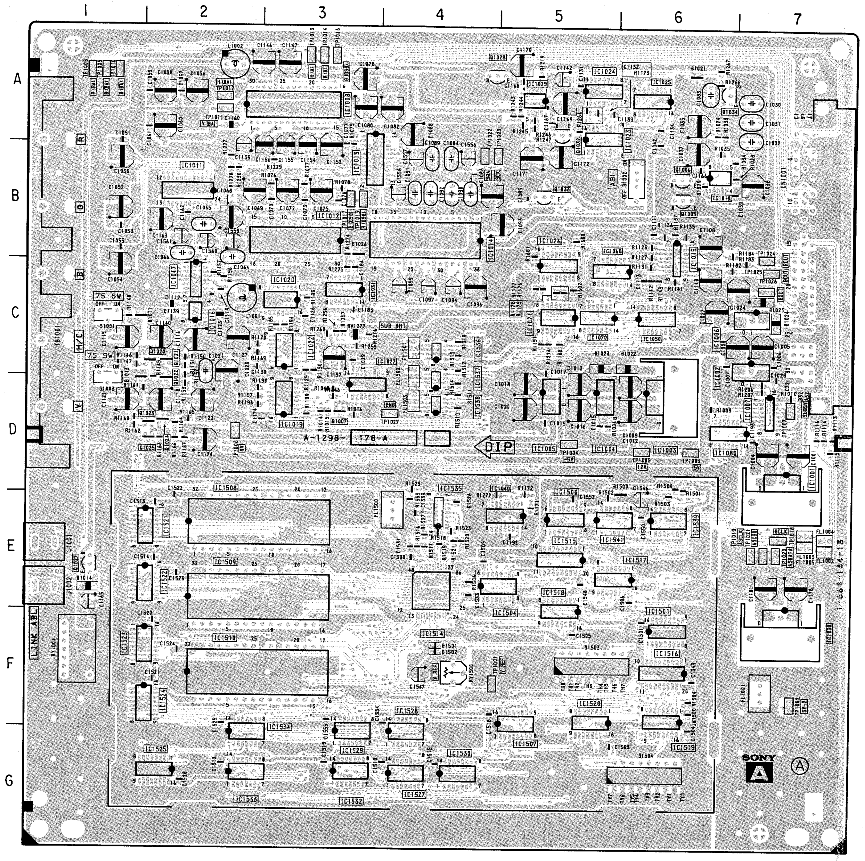

AM
SONY
1-664-141-12
CN121
CN123
CN126

AM -B SIDE-
1-664-141-12

A BOARD

*: B SIDE

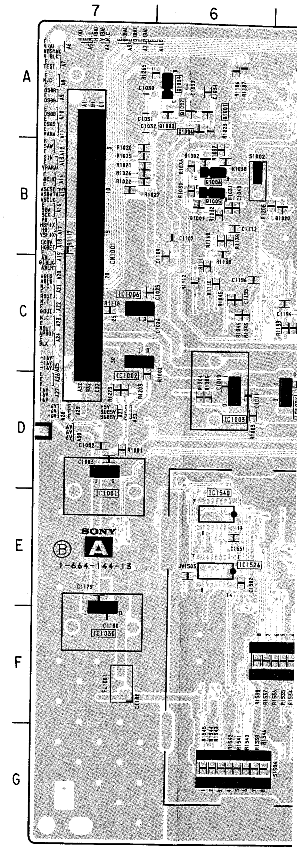
*CN1001	B-6
*D1001	B-6
*D1002	B-6
*D1004	B-1
*D1005	B-1
*D1006	B-1
*D1007	B-5
*D1010	C-1
D1011	C-1
*D1012	D-1
D1013	D-1
D1014	E-1
*D1015	A-5
*D1016	A-5
*D1017	C-2
*D1020	B-5
D1021	A-6
D1022	C-6
D1023	C-5
D1024	C-7
D1025	C-7
D1026	B-3
D1500	D-6
D1501	F-4
D1502	F-4
*D1504	E-1
*FL1001	F-7
FL1002	E-7
FL1003	E-7
FL1004	E-7
FL1005	E-7
*FL1500	E-4
FL1501	C-4
FL1502	C-4
FL1503	D-4
*IC1001	D-7
*IC1002	C-7
*IC1003	D-6
*IC1004	D-5
*IC1005	D-5
*IC1006	C-7
IC1007	D-7
*IC1008	A-3
IC1010	B-6
IC1011	B-2
*IC1012	B-3
IC1013	B-3
*IC1014	B-4
IC1015	B-6
IC1016	C-2
IC1017	C-2
*IC1018	D-2
IC1019	D-3
IC1020	C-3
IC1021	C-5
IC1022	C-3
IC1023	A-5
IC1024	A-5
IC1025	A-6
IC1026	C-5
IC1027	D-3
IC1029	A-5
*IC1030	E-7
IC1031	C-3
IC1040	E-5
IC1050	C-6
IC1060	C-5
IC1070	C-5
IC1080	D-6
IC1500	E-5
IC1501	F-6
*IC1502	E-4
*IC1503	F-4
IC1504	E-5
*IC1505	F-5
*IC1506	G-5
IC1507	F-5
*IC1508	E-2
*IC1509	E-2
*IC1510	F-2
*IC1511	E-3
*IC1512	F-3
*IC1513	F-4
IC1514	E-4
IC1515	E-5
IC1516	F-6
IC1517	E-5
IC1518	E-5
IC1519	F-6
IC1520	F-5
IC1521	E-2
IC1522	E-2
IC1523	F-2
IC1524	F-2
IC1525	G-2
*IC1526	E-6
IC1527	G-4
IC1528	F-4
IC1529	F-3
IC1530	G-4
*IC1531	G-3
IC1532	G-3
IC1533	G-2
IC1534	G-2
IC1535	E-4
IC1536	C-4
IC1537	D-4
IC1538	D-4
IC1539	E-6
*IC1540	E-6
IC1541	E-5
*IC1542	F-3
*L1001	C-2
*L1002	A-2
*Q1001	A-6
*Q1002	A-6
*Q1003	A-6
*Q1004	A-6
*Q1005	B-6
*Q1006	B-6
Q1007	D-3
Q1020	C-2
Q1021	C-2
Q1022	D-2
Q1023	D-2
Q1024	D-2
Q1025	D-2
*Q1027	E-1
*Q1028	A-4
*Q1031	A-5
*Q1032	A-5
*Q1033	B-5
*Q1034	A-6
*Q1035	D-1
*Q1036	D-1
*RV1500	F-4
*S1001	C-1
*S1002	B-6
*S1003	C-1
*S1503	F-5
*S1504	G-6
TP1001	F-4
TP1002	F-7
TP1003	D-6
TP1004	D-5
TP1005	D-6
TP1006	D-2
TP1007	D-7
TP1008	A-1
TP1009	A-1
TP1010	A-1
TP1011	A-2
TP1012	A-2
TP1013	A-3
TP1014	A-3
TP1015	B-3
TP1016	A-3
TP1017	B-3
TP1018	E-7
TP1019	E-7
TP1020	E-7
TP1021	E-7
TP1022	B-4
TP1023	B-4
TP1024	B-7
TP1025	C-7
TP1026	C-7
TP1027	D-4

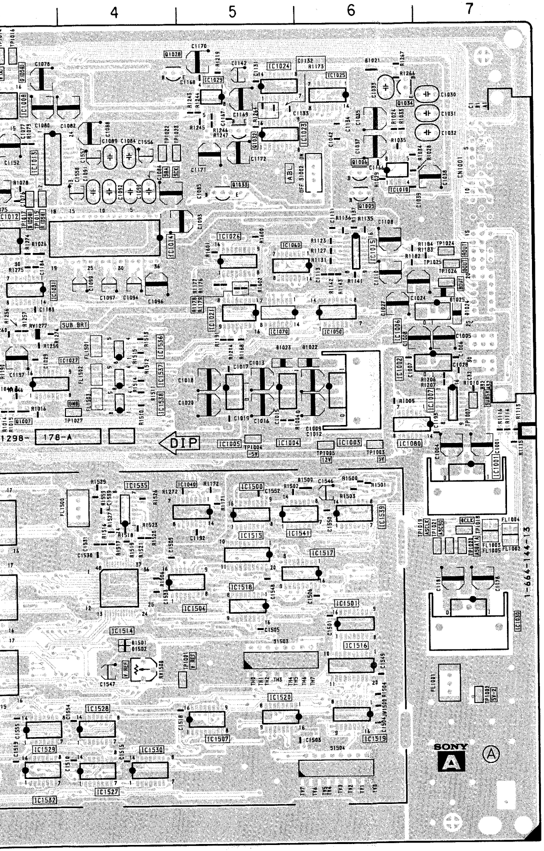


A -A SIDE-

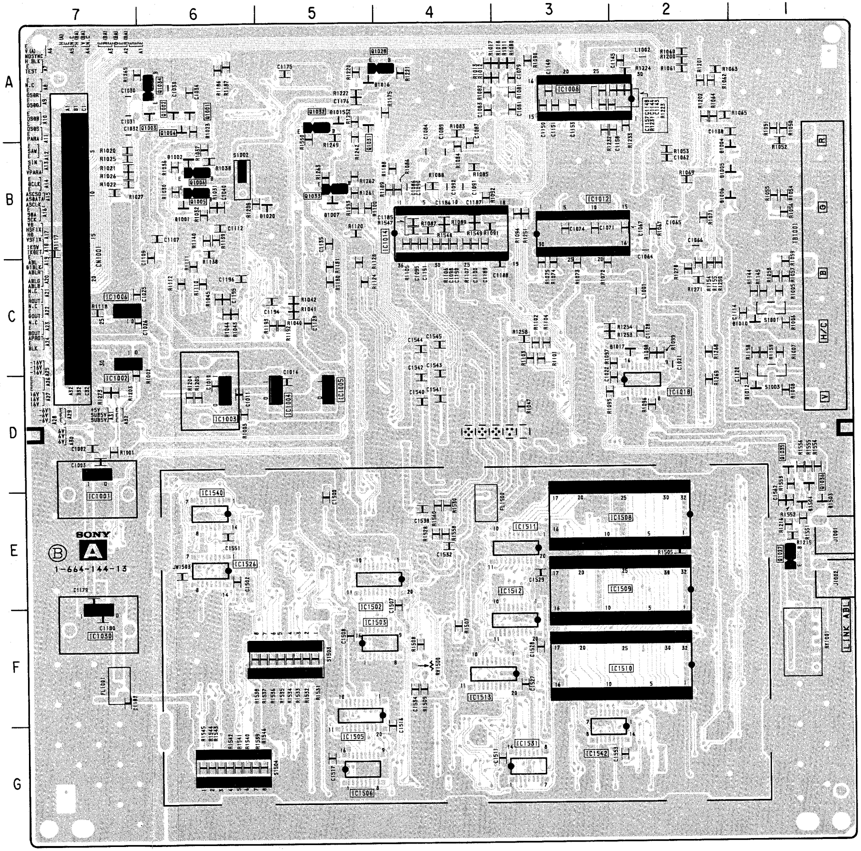
1-664-144-13

RVP-411D/411DM

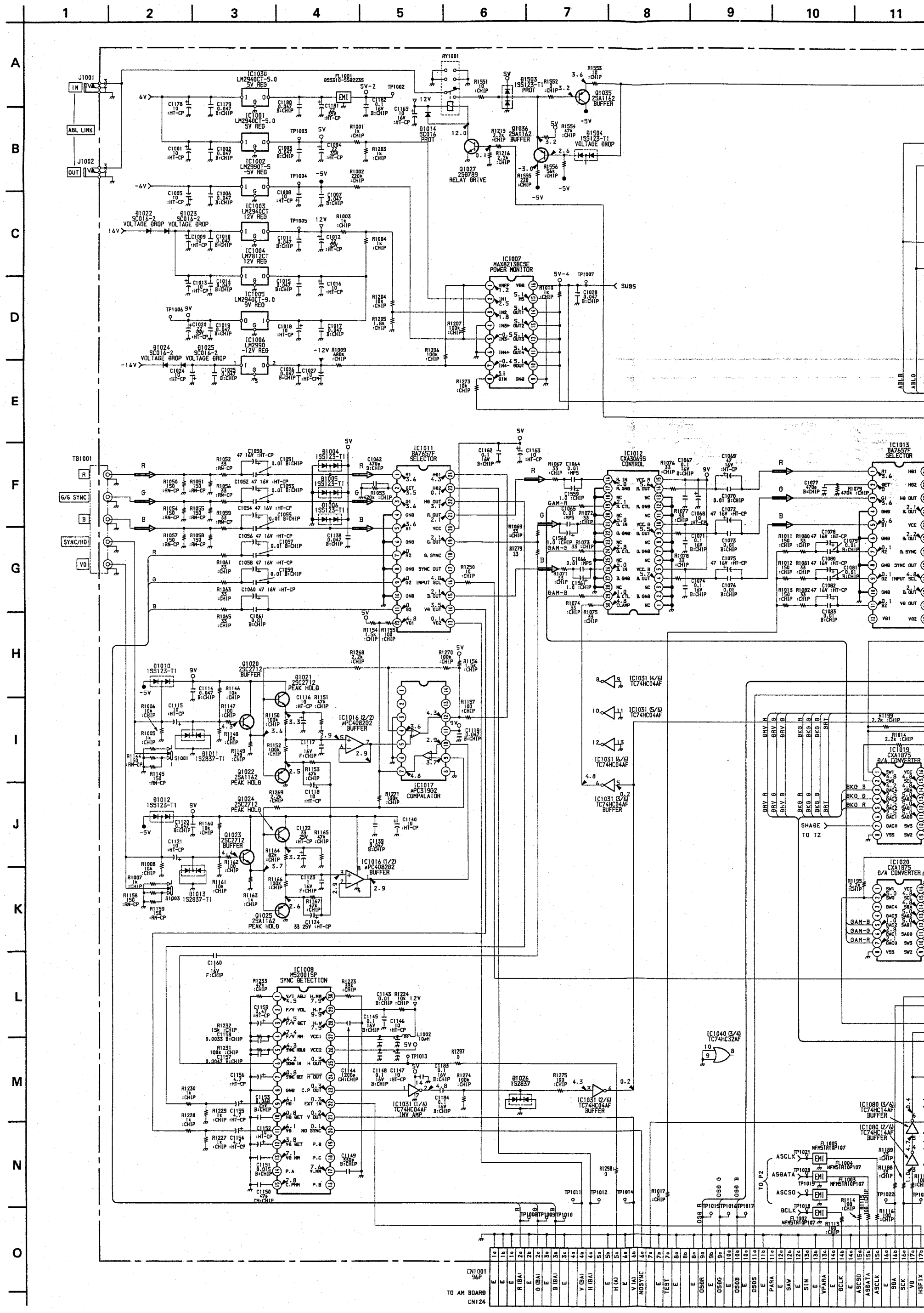


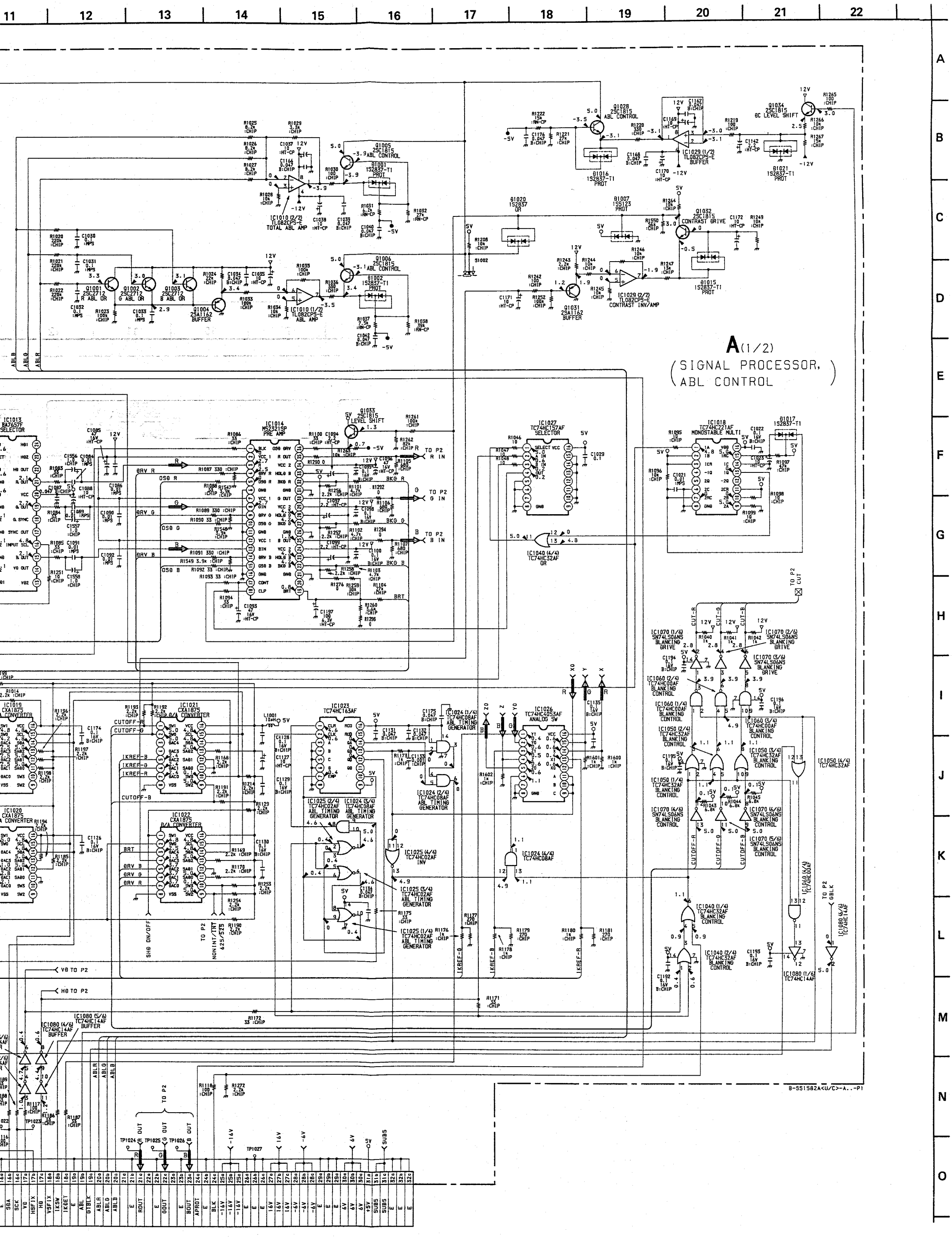

4
5
6
7
SONY
A
DIP
178-A
SUB BRT
1-664-144-13

A -A SIDE-
1-664-144-13
RVP-411D/411DM

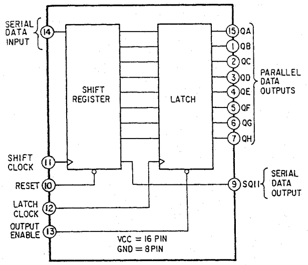

7
6
5
4
3
2
1
A
B
C
D
E
F
G
SONY
A
1-664-144-13
LINK ABL
R
G
B
H/C
V

A -B SIDE-
1-664-144-13
RVP-411D/411DM

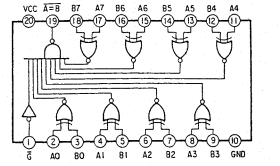

1
2
3
4
5
6
7
8
9
10
11
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
J1001
IN
ABL LINK
J1002
OUT
IC1030 LM2940CT-5.0 5V REG
FL1001 0SS510-55B223S
EMI
SV-2
TP1002
IC1001 LM2940CT-5.0 5V REG
IC1002 LM2990T-5 -5V REG
IC1003 LM2940CT 12V REG
IC1004 LM7812CT 12V REG
IC1005 LM2940CT-9.0 9V REG
IC1006 LM2990 -12V REG
Q1022 SC016-2 VOLTAGE DROP
Q1023 SC016-2 VOLTAGE DROP
Q1024 SC016-2 VOLTAGE DROP
Q1025 SC016-2 VOLTAGE DROP
6V
-6V
16V
-16V
RY1001
Q1014 SC016 PROT
Q1027 2SB789 RELAY DRIVE
Q1036 2SA1162 BUFFER
Q1503 1SS123-T1 PROT
Q1035 2SA1162 BUFFER
Q1504 1SS123-T1 VOLTAGE DROP
IC1007 MAX8213BCSE POWER MONITOR
SUBS
TB1001
R
G/G SYNC
B
SYNC/HD
VD
IC1011 BA7657F SELECTOR
Q1004 1SS123-T1
Q1005 1SS123-T1
Q1006 1SS123-T1
IC1012 CXA3069S CONTROL
GAM-R
GAM-G
GAM-B
IC1013 BA7657F SELECTOR
Q1010 1SS123-T1
Q1011 1S2837-T1
Q1012 1SS123-T1
Q1013 1S2837-T1
Q1020 2SC2712 BUFFER
Q1021 2SC2712 PEAK HOLD
Q1022 2SA1162 PEAK HOLD
Q1023 2SC2712 BUFFER
Q1024 2SC2712 PEAK HOLD
Q1025 2SA1162 PEAK HOLD
IC1016 (2/2) µPC4082G2 BUFFER
IC1016 (1/2) µPC4082G2 BUFFER
IC1017 µPC3190Z COMPALATOR
S1001
S1003
IC1031 (4/6) TC74HC04AF
IC1031 (5/6) TC74HC04AF
IC1031 (6/6) TC74HC04AF
IC1031 (3/6) TC74HC04AF BUFFER
IC1019 CXA1875 D/A CONVERTER
IC1020 CXA1875 D/A CONVERTER
DRV R
DRV G
DRV B
BKG R
BKG G
BKG B
BRT
SHADE
TO T2
IC1008 M52001SP SYNC DETECTION
IC1031 (1/6) TC74HC04AF INV AMP
Q1026 1S2837
IC1031 (2/6) TC74HC04AF BUFFER
IC1040 (3/4) TC74HC32AF
IC1080 (3/6) TC74HC14AF BUFFER
IC1080 (2/6) TC74HC14AF BUFFER
FL1005 NFM51R10P107
FL1004 NFM51R10P107
FL1003 NFM51R10P107
FL1002 NFM51R10P107
ASCLK
ASDATA
ASCSO
BCLK
TO P2
OSD R
OSD G
OSD B
CN1001 96P
TO AM BOARD CN124
R (BA)
G (BA)
B (BA)
V (BA)
H (BA)
H (A)
V (A)
NOSYNC
TEST
OSDR
OSDG
OSDB
OSDS
PARA
SAW
SIN
VPARA
BCLK
ASCSO
ASDATA
ASCLK
SDA
SCK
VD
HSFIX


A(1/2)
(SIGNAL PROCESSOR, ABL CONTROL)
IC1010 (2/2) TL082CPS-E TOTAL ABL AMP
IC1010 (1/2) TL082CPS-E ABL AMP
Q1001 2SC2712 R ABL OR
Q1002 2SC2712 G ABL OR
Q1003 2SC2712 B ABL OR
Q1004 2SA1162 BUFFER
Q1005 2SC1815 ABL CONTROL
Q1006 2SC1815 ABL CONTROL
Q1028 2SC1815 ABL CONTROL
IC1029 (1/2) TL082CPS-E BUFFER
IC1029 (2/2) TL082CPS-E CONTRAST INV/AMP
Q1031 2SA1162 BUFFER
Q1032 2SC1815 CONTRAST DRIVE
Q1034 2SC1815 BC LEVEL SHIFT
Q1033 2SC1815 LEVEL SHIFT
IC1013 BA7657F SELECTOR
IC1014 M52321SP PRE AMP
IC1027 TC74HC157AF SELECTOR
IC1018 TC74HC221AF MONOSTABLE MULTI
IC1040 (4/4) TC74HC32AF OR
IC1019 CXA1875 D/A CONVERTER
IC1020 CXA1875 D/A CONVERTER
IC1021 CXA1875 D/A CONVERTER
IC1022 CXA1875 D/A CONVERTER
IC1023 TC74HC163AF
IC1024 (1/4) TC74HC08AF ABL TIMING GENERATOR
IC1024 (2/4) TC74HC08AF ABL TIMING GENERATOR
IC1024 (4/4) TC74HC08AF
IC1025 (1/4) TC74HC02AF ABL TIMING GENERATOR
IC1025 (2/4) TC74HC02AF ABL TIMING GENERATOR
IC1025 (3/4) TC74HC02AF ABL TIMING GENERATOR
IC1025 (4/4) TC74HC02AF INV
IC1026 TC74HC4053AF ANALOG SW
IC1060 TC74HC00AF BLANKING CONTROL
IC1050 TC74HC32AF BLANKING CONTROL
IC1070 SN74LS06NS BLANKING DRIVE
IC1040 TC74HC32AF BLANKING CONTROL
IC1080 TC74HC14AF BUFFER
TO P2 R IN
TO P2 G IN
TO P2 B IN
TO P2 CUT
TO P2 GBLK
VB TO P2
HB TO P2
SHD ON/OFF
NONINT/INT 625/525
B-SS1582A<U/C>-A..-P1

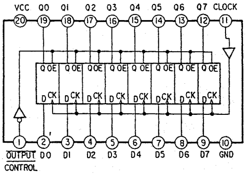
A (2/2) BOARD IC1500, IC1501 TC74HC595AF


SERIAL DATA INPUT
SHIFT REGISTER
LATCH
QA
QB
QC
QD
QE
QF
QG
QH
PARALLEL DATA OUTPUTS
SHIFT CLOCK
RESET
LATCH CLOCK
OUTPUT ENABLE
SQH
SERIAL DATA OUTPUT
VCC = 16 PIN
GND = 8 PIN

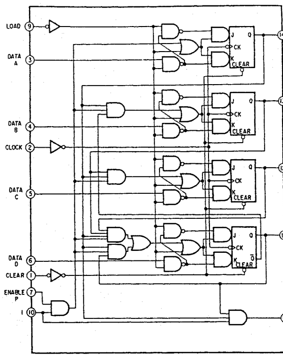
A (2/2) BOARD IC1502, IC1505 TC74HC688AF

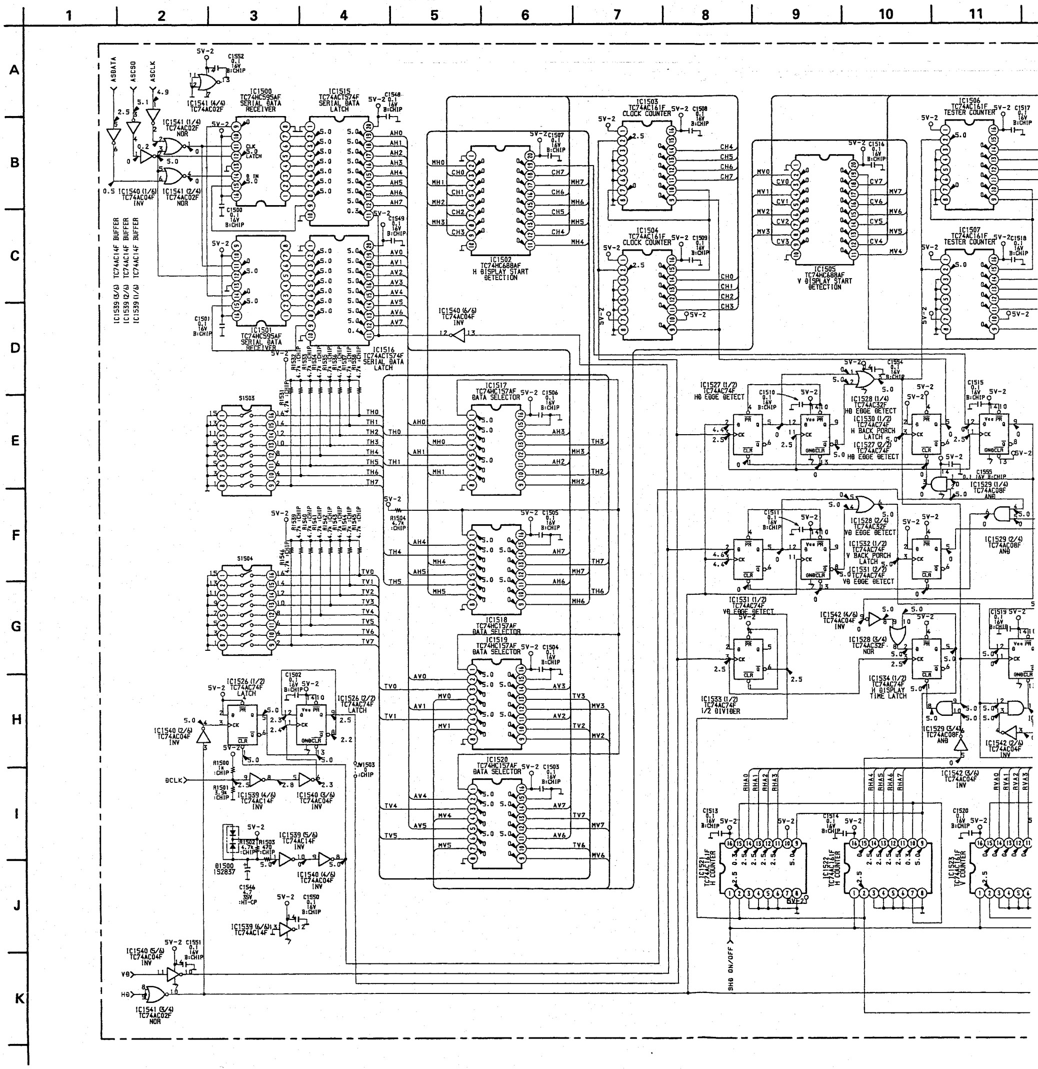

VCC
A=B
B7
A7
B6
A6
B5
A5
B4
A4
G
A0
B0
A1
B1
A2
B2
A3
B3
GND

A (2/2) BOARD IC1511-IC1513, IC1515, IC1516 TC74ACT574F


VCC
Q0
Q1
Q2
Q3
Q4
Q5
Q6
Q7
CLOCK
Q OE
D CK
OUTPUT CONTROL
D0
D1
D2
D3
D4
D5
D6
D7
GND

A (2/2) BOARD IC1503, IC1504, IC1506, IC15
IC1521-IC1524 TC74AC161F


LOAD
DATA A
DATA B
CLOCK
DATA C
DATA D
CLEAR
ENABLE P
T
J
Q
CK
K
CLEAR


1
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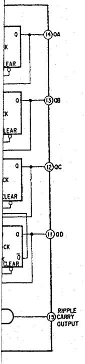
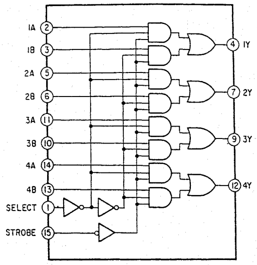
9
10
11
A
B
C
D
E
F
G
H
I
J
K
ASDATA
ASCSO
ASCLK
IC1541 (4/4) TC74AC02F
IC1541 (1/4) TC74AC02F NOR
IC1540 (1/6) TC74AC04F INV
IC1541 (2/4) TC74AC02F NOR
IC1539 (3/6) TC74AC14F BUFFER
IC1539 (2/6) TC74AC14F BUFFER
IC1539 (1/6) TC74AC14F BUFFER
IC1500 TC74HC595AF SERIAL DATA RECEIVER
IC1501 TC74HC595AF SERIAL DATA RECEIVER
IC1515 TC74ACT574F SERIAL DATA LATCH
IC1516 TC74ACT574F SERIAL DATA LATCH
IC1502 TC74HC688AF H DISPLAY START DETECTION
IC1503 TC74AC161F CLOCK COUNTER
IC1504 TC74AC161F CLOCK COUNTER
IC1505 TC74HC688AF V DISPLAY START DETECTION
IC1506 TC74AC161F TESTER COUNTER
IC1507 TC74AC161F TESTER COUNTER
IC1540 (6/6) TC74AC04F INV
S1503
S1504
IC1517 TC74HC157AF DATA SELECTOR
IC1518 TC74HC157AF DATA SELECTOR
IC1519 TC74HC157AF DATA SELECTOR
IC1520 TC74HC157AF DATA SELECTOR
IC1527 (1/2) TC74AC74F HD EDGE DETECT
IC1528 (1/4) TC74AC32F HD EDGE DETECT
IC1530 (1/2) TC74AC74F H BACK PORCH LATCH
IC1527 (2/2) TC74AC74F HD EDGE DETECT
IC1529 (1/4) TC74AC08F AND
IC1528 (2/4) TC74AC32F VD EDGE DETECT
IC1532 (1/2) TC74AC74F V BACK PORCH LATCH
IC1531 (2/2) TC74AC74F VD EDGE DETECT
IC1529 (2/4) TC74AC08F AND
IC1531 (1/2) TC74AC74F VD EDGE DETECT
IC1533 (1/2) TC74AC74F 1/2 DIVIDER
IC1542 (4/6) TC74AC04F INV
IC1528 (3/4) TC74AC32F NOR
IC1534 (1/2) TC74AC74F H DISPLAY TIME LATCH
IC1529 (3/4) TC74AC08F AND
IC1542 (2/6) TC74AC04F INV
IC1542 (3/6) TC74AC04F INV
IC1521 TC74AC161F H COUNTER
IC1522 TC74AC161F H COUNTER
IC1523 TC74AC161F V COUNTER
IC1526 (1/2) TC74AC74F LATCH
IC1526 (2/2) TC74AC74F LATCH
IC1540 (2/6) TC74AC04F INV
DCLK
IC1539 (4/6) TC74AC14F INV
IC1540 (3/6) TC74AC04F INV
IC1539 (5/6) TC74AC14F INV
IC1540 (4/6) TC74AC04F INV
D1500 1S2837
IC1539 (6/6) TC74AC14F
IC1540 (5/6) TC74AC04F INV
VD
HD
IC1541 (3/4) TC74AC02F NOR
SHD ON/OFF
5V-2

06, IC1507,
AC161F



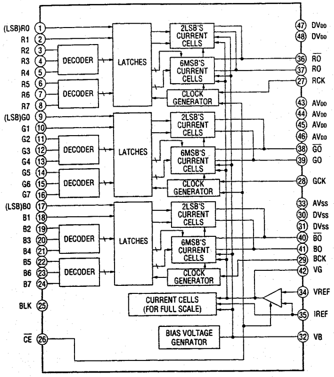
14 QA
13 QB
12 QC
11 QD
CLEAR
CK
15 RIPPLE CARRY OUTPUT

A (2/2) BOARD IC1517-IC1520, IC1525 TC74HC157AF



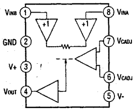
1A 2
1B 3
2A 5
2B 6
3A 11
3B 10
4A 14
4B 13
SELECT 1
STROBE 15
4 1Y
7 2Y
9 3Y
12 4Y

A (2/2) BOARD IC1514 CXD1178Q

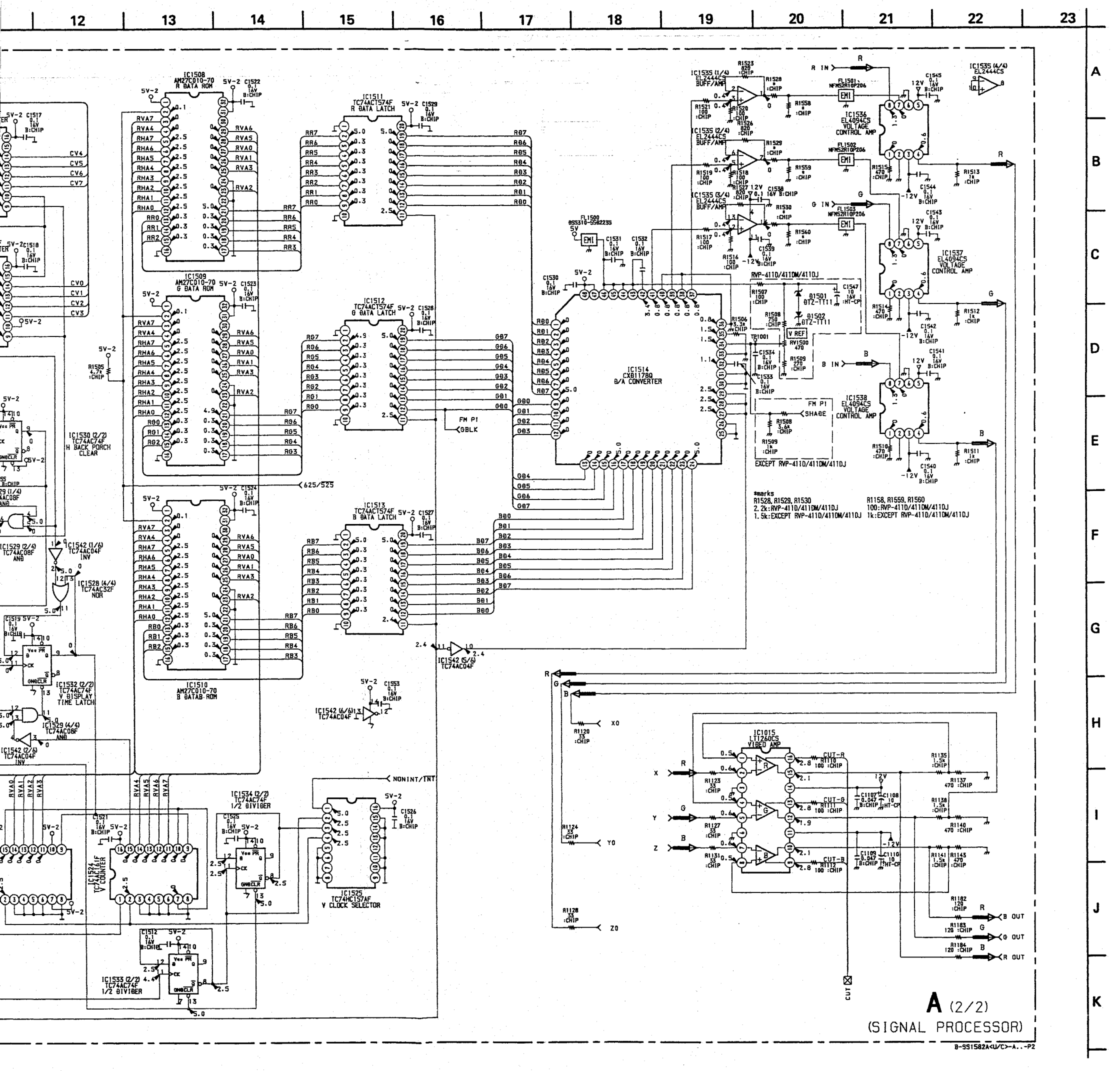


(LSB)R0 1
R1 2
R2 3
R3 4
R4 5
R5 6
R6 7
R7 8
(LSB)G0 9
G1 10
G2 11
G3 12
G4 13
G5 14
G6 15
G7 16
(LSB)B0 17
B1 18
B2 19
B3 20
B4 21
B5 22
B6 23
B7 24
BLK 25
CE 26
DECODER
LATCHES
2LSB'S CURRENT CELLS
6MSB'S CURRENT CELLS
CLOCK GENERATOR
CURRENT CELLS (FOR FULL SCALE)
BIAS VOLTAGE GENRATOR
47 DVDD
48 DVDD
36 RO
37 RO
27 RCK
43 AVDD
44 AVDD
45 AVDD
46 AVDD
38 GO
39 GO
28 GCK
33 AVSS
30 DVSS
31 DVSS
40 BO
41 BO
29 BCK
42 VG
34 VREF
35 IREF
32 VB

A (2/2) BOARD IC1536-IC1538 EL4094CS



VINB 1
GND 2
V+ 3
VOUT 4
8 VINA
7 VCADJ
6 VCADJ
5 V-
+1
+1



12
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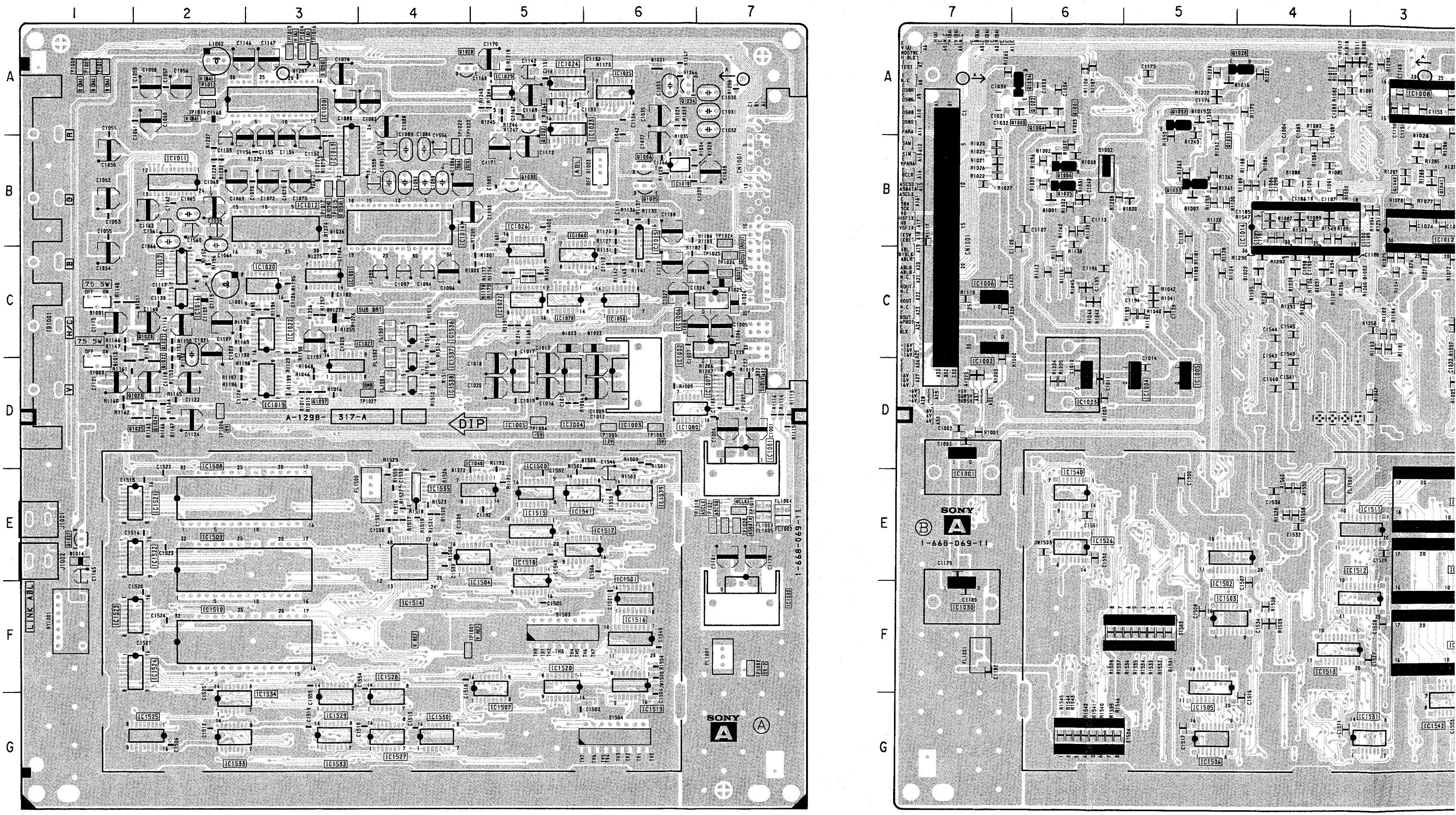
21
22
23
A
B
C
D
E
F
G
H
I
J
K
IC1508 AM27C010-70 R DATA ROM
IC1509 AM27C010-70 G DATA ROM
IC1510 AM27C010-70 B DATAB ROM
IC1511 TC74ACT574F R DATA LATCH
IC1512 TC74ACT574F G DATA LATCH
IC1513 TC74ACT574F B DATA LATCH
IC1514 CXD1178Q D/A CONVERTER
IC1535 (1/4) EL2444CS BUFF/AMP
IC1535 (2/4) EL2444CS BUFF/AMP
IC1535 (3/4) EL2444CS BUFF/AMP
IC1535 (4/4) EL2444CS
IC1536 EL4094CS VOLTAGE CONTROL AMP
IC1537 EL4094CS VOLTAGE CONTROL AMP
IC1538 EL4094CS VOLTAGE CONTROL AMP
IC1015 LT1260CS VIDEO AMP
IC1525 TC74HC157AF V CLOCK SELECTOR
IC1524 TC74AC161F V COUNTER
IC1530 (2/2) TC74AC74F H BACK PORCH CLEAR
IC1532 (2/2) TC74AC74F V DISPLAY TIME LATCH
IC1533 (2/2) TC74AC74F 1/2 DIVIDER
IC1534 (2/2) TC74AC74F 1/2 DIVIDER
IC1542 (1/6) TC74AC04F INV
IC1542 (5/6) TC74AC04F
IC1542 (6/6) TC74AC04F
IC1542 (2/6) TC74AC04F INV
IC1528 (4/4) TC74AC32F NOR
IC1529 (2/4) TC74AC08F AND
IC1529 (4/4) TC74AC08F AND
FL1500 0SS310-550223S
FL1501 NFM52R10P206
FL1502 NFM52R10P206
FL1503 NFM52R10P206
R IN
G IN
B IN
R
G
B
X
Y
Z
X0
Y0
Z0
B OUT
G OUT
R OUT
CUT
CUT-R
CUT-G
CUT-B
625/525
NONINT/INT
FM P1
GBLK
SHADE
V REF
RVP-411D/411DM/411DJ
EXCEPT RVP-411D/411DM/411DJ
*marks
R1528, R1529, R1530
2.2k:RVP-411D/411DM/411DJ
1.5k:EXCEPT RVP-411D/411DM/411DJ
R1158, R1559, R1560
100:RVP-411D/411DM/411DJ
1k:EXCEPT RVP-411D/411DM/411DJ
A (2/2)
(SIGNAL PROCESSOR)
B-SS1582A<U/C>-A..-P2


1
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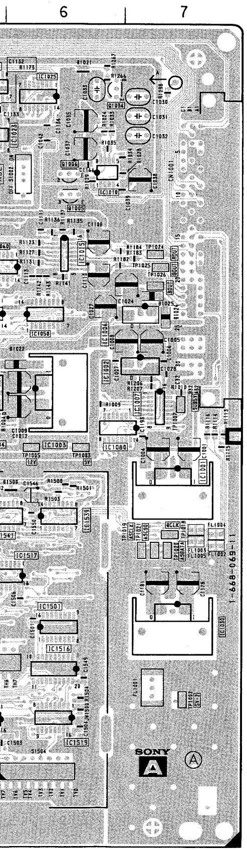
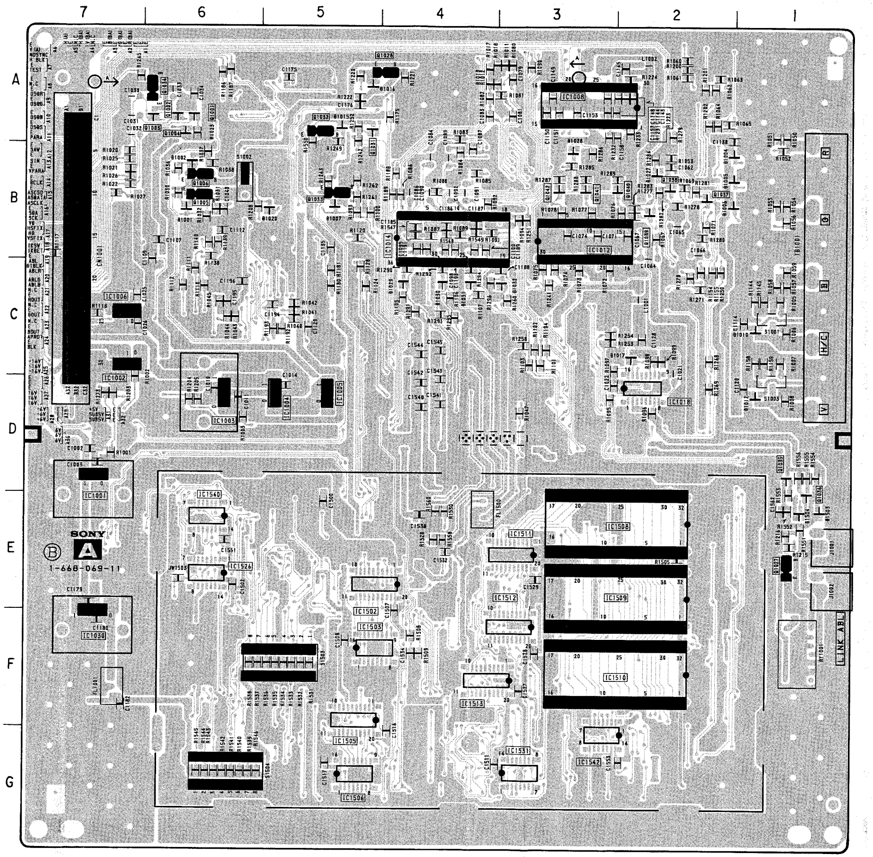
6
7
A
B
C
D
E
F
G
A-1298-317-A
DIP
1-668-069-11
SONY
A
Ⓐ
Ⓑ
LINK ABL
75 SW
H/C
SUB BRT
ABL

A -A SIDE-
1-668-069-11
RVP-411DS/411DMS/
511DS/511DMS
CHP-411D/411DM



A **-A SIDE-**
1-668-069-11
RVP-411DS/411DMS/
511DS/511DMS
CHP-411D/411DM



A **-B SIDE-**
1-668-069-11
RVP-411DS/411DMS/
511DS/511DMS
CHP-411D/411DM

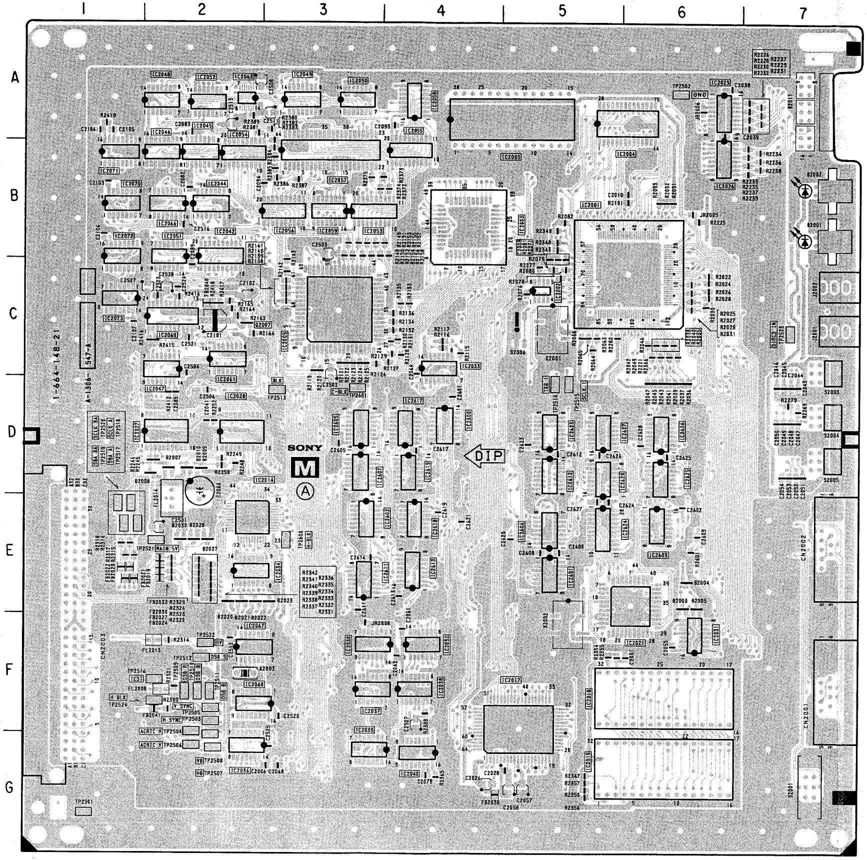
*: B SIDE

*CN1001	B-6
*D1001	B-6
*D1002	B-6
*D1004	B-2
*D1005	B-2
*D1006	B-2
*D1007	B-5
*D1010	C-1
D1011	C-1
*D1012	D-1
D1013	D-1
D1014	E-1
*D1015	A-5
*D1016	A-5
*D1017	C-2
*D1020	B-5
D1021	A-6
D1022	C-6
D1023	C-5
D1024	C-7
D1025	C-7
D1026	B-3
D1500	D-6
*D1504	E-1
*FL1001	F-7
FL1002	E-7
FL1003	E-7
FL1004	E-7
FL1005	E-7
*FL1500	E-4
FL1501	C-4
FL1502	C-4
FL1503	D-4
*IC1001	D-7
*IC1002	C-7
*IC1003	D-6
*IC1004	D-5
*IC1005	D-5
*IC1006	C-7
IC1007	D-7
*IC1008	A-3
IC1010	B-6
IC1011	B-2
*IC1012	B-3
IC1013	B-3
*IC1014	B-4
IC1015	B-6
IC1016	C-2
IC1017	C-2
*IC1018	D-2
IC1019	D-3
IC1020	C-3
IC1021	C-5
IC1022	C-3
IC1023	A-5
IC1024	A-5
IC1025	A-6
IC1026	C-5
IC1027	D-3
IC1029	A-5
*IC1030	F-7
IC1031	C-3
IC1040	E-5
IC1050	C-6
IC1060	C-5
IC1070	C-5
IC1080	D-6
IC1500	E-5
IC1501	F-6
*IC1502	E-5
*IC1503	F-5
IC1504	E-4
*IC1505	F-5
*IC1506	G-5
IC1507	F-5
*IC1508	E-2
*IC1509	E-2
*IC1510	F-2
*IC1511	E-3
*IC1512	F-3
*IC1513	F-4
IC1514	E-4
IC1515	E-5
IC1516	F-6
IC1517	E-5
IC1518	E-5
IC1519	G-6
IC1520	F-5
IC1521	E-2
IC1522	E-2
IC1523	F-2
IC1524	F-2
IC1525	G-2
*IC1526	E-6
IC1527	G-4
IC1528	C-4
IC1529	G-3
IC1530	G-4
*IC1531	G-3
IC1532	G-3
IC1533	G-2
IC1534	G-2
IC1535	E-4
IC1536	C-4
IC1537	D-4
IC1538	D-4
IC1539	E-6
*IC1540	E-6
IC1541	E-5
*IC1542	G-3
*L1001	C-2
*L1002	A-2
*Q1001	A-6
*Q1002	A-6
*Q1003	A-6
*Q1004	A-6
*Q1005	B-6
*Q1006	B-6
Q1007	D-3
Q1020	C-2
Q1021	C-2
Q1022	D-2
Q1023	D-2
Q1024	D-2
Q1025	D-2
*Q1027	E-1
*Q1028	A-4
*Q1031	A-5
*Q1032	A-5
*Q1033	B-5
*Q1034	A-6
*Q1035	D-1
*Q1036	D-1
*S1001	C-1
*S1002	B-6
*S1003	D-1
*S1503	F-5
*S1504	G-6
TP1001	F-4
TP1002	F-7
TP1003	D-6
TP1004	D-5
TP1005	D-6
TP1006	D-2
TP1007	D-7
TP1008	A-1
TP1009	A-1
TP1010	A-1
TP1011	A-2
TP1012	A-2
TP1013	A-3
TP1014	A-3
TP1015	B-3
TP1016	A-3
TP1017	B-3
TP1018	E-7
TP1019	E-7
TP1020	E-7
TP1021	E-7
TP1022	B-4
TP1023	B-4
TP1024	B-7
TP1025	C-7
TP1026	C-7
TP1027	D-4

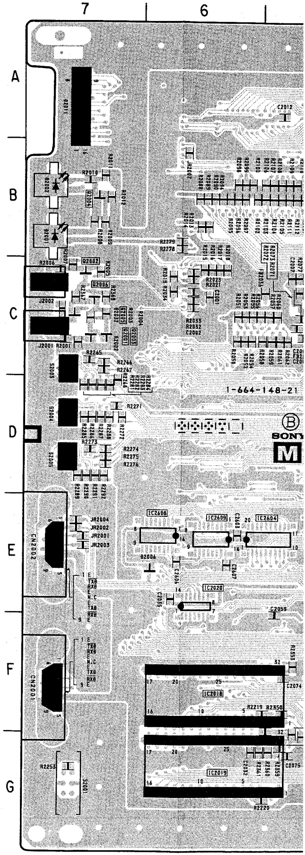
M BOARD

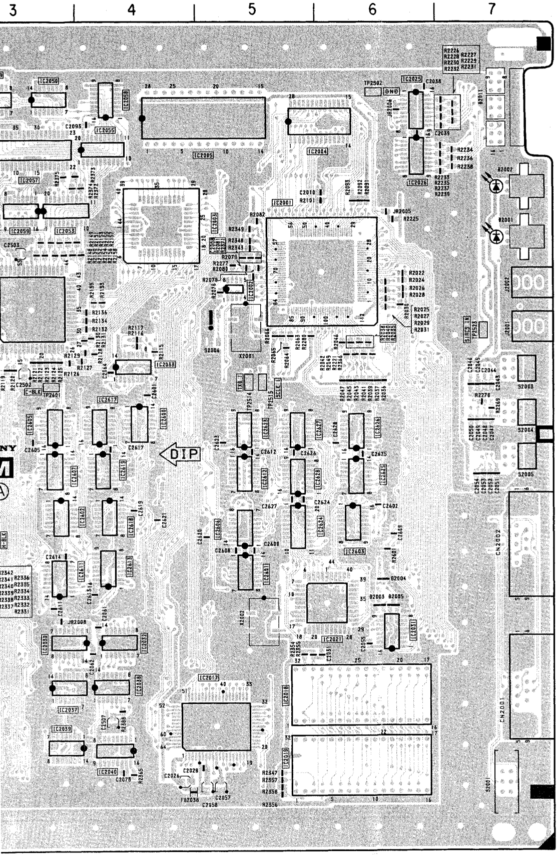
*: B SIDE

*CN2001	F-7
*CN2002	E-7
*CN2003	E-1
*D2001	B-7
*D2002	B-7
D2003	E-6
D2004	E-6
D2005	E-6
D2006	E-6
D2007	D-2
D2008	D-2
D2009	D-2
D2010	D-2
*D2011	A-7
D2020	E-2
D2021	E-2
D2022	E-2
D2023	E-3
*D2024	E-2
*D2025	E-3
*D2026	E-3
D2027	E-2
D2028	E-2
*D2029	E-2
D2030	E-2
*D2031	E-2
*D2032	C-7
*FL2001	G-2
*FL2002	G-2
*FL2003	F-2
*FL2004	F-2
*FL2005	F-2
*FL2006	F-2
FL2008	F-2
*FL2010	F-2
*FL2011	F-2
*FL2012	F-2
FL2013	F-2
*FL2014	E-2
IC2001	C-6
IC2002	C-5
IC2003	B-4
IC2004	A-6
*IC2005	A-5
IC2009	C-3
IC2014	E-2
IC2017	F-5
*IC2020	E-6
IC2021	E-6
IC2025	A-6
IC2026	B-6
IC2027	D-2
IC2028	D-2
IC2030	F-3
IC2031	F-6
IC2032	F-4
IC2033	C-4
IC2034	E-2
*IC2035	G-3
IC2036	G-2
IC2037	F-3
IC2038	F-4
IC2039	G-3
IC2040	G-4
*IC2041	C-2
IC2042	B-2
*IC2043	A-3
IC2044	B-2
IC2045	B-2
IC2046	B-2
IC2047	C-2
IC2048	A-2
IC2049	A-3
IC2050	A-3
IC2051	B-2
IC2052	A-2
IC2053	B-3
IC2054	B-2
IC2055	B-4
IC2056	B-3
IC2057	B-3
IC2058	A-4
IC2059	B-3
*IC2060	C-2
IC2061	C-2
*IC2062	C-2
IC2063	A-2
*IC2064	B-3
*IC2065	B-3
IC2066	B-2
IC2067	F-2
IC2068	F-2
IC2069	C-2
IC2070	B-1
IC2071	B-1
IC2072	B-1
IC2073	C-1
IC2600	D-4
IC2601	E-5
IC2602	E-3
IC2603	E-6
*IC2604	E-5
IC2605	D-3
IC2606	E-5
IC2607	D-3
*IC2608	E-6
*IC2609	E-6
*IC2610	E-5
IC2611	E-3
IC2612	D-5
IC2613	E-4
*IC2614	E-3
*IC2615	E-4
*IC2616	E-4
IC2617	D-4
IC2618	E-4
IC2619	D-4
*IC2620	E-5
*IC2621	E-4
*IC2622	F-3
IC2623	D-5
IC2624	E-5
IC2625	D-6
IC2626	D-6
IC2627	D-5
IC2628	D-5
*L2002	G-5
*L2003	C-5
*L2004	A-2
*L2005	C-2
*Q2001	C-7
*Q2002	C-7
*Q2003	C-7
*Q2004	B-7
*Q2005	C-7
*Q2006	C-7
Q2007	C-2
*S2001	G-7
*S2003	C-7
*S2004	D-7
*S2005	D-7
S2006	C-5
TP2501	G-1
TP2502	A-6
TP2503	F-2
TP2504	F-2
TP2505	F-2
TP2506	G-2
TP2507	G-2
TP2508	G-2
TP2509	F-2
TP2510	F-2
TP2511	F-2
TP2512	F-2
TP2513	D-3
TP2514	D-5
TP2515	D-5
TP2516	F-2
TP2517	E-1
TP2518	E-1
TP2519	E-1
TP2520	E-1
TP2521	E-2
TP2522	F-2
TP2523	C-7
TP2524	F-2
X2001	C-5
X2002	F-5
*X2003	F-2



M -A SIDE-
1-664-148-21





M -A SIDE-

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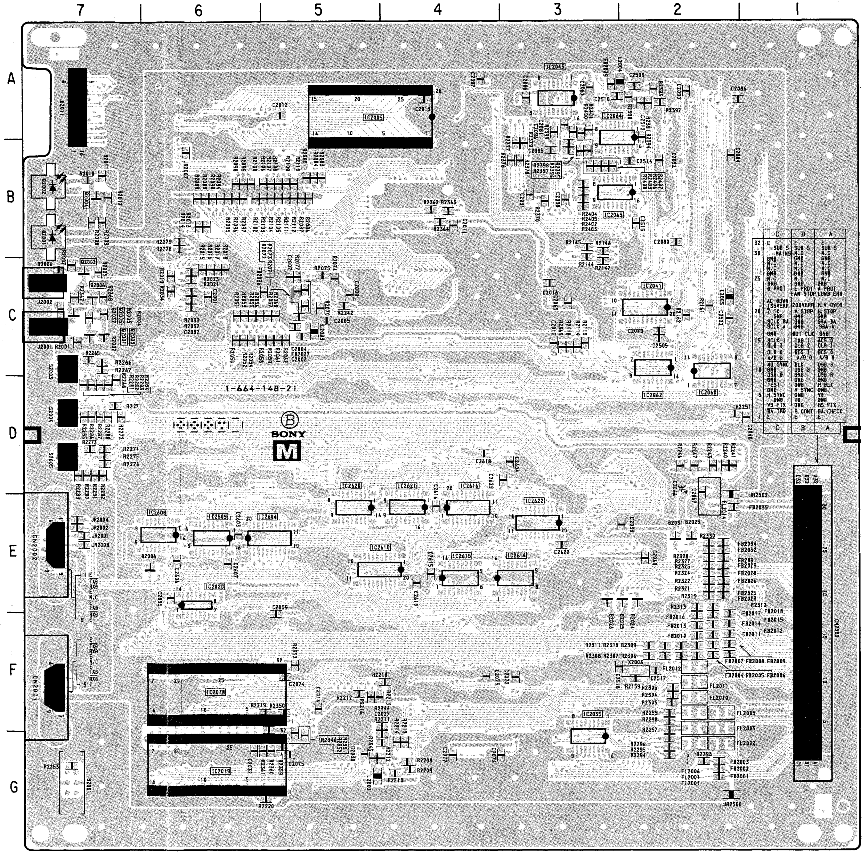
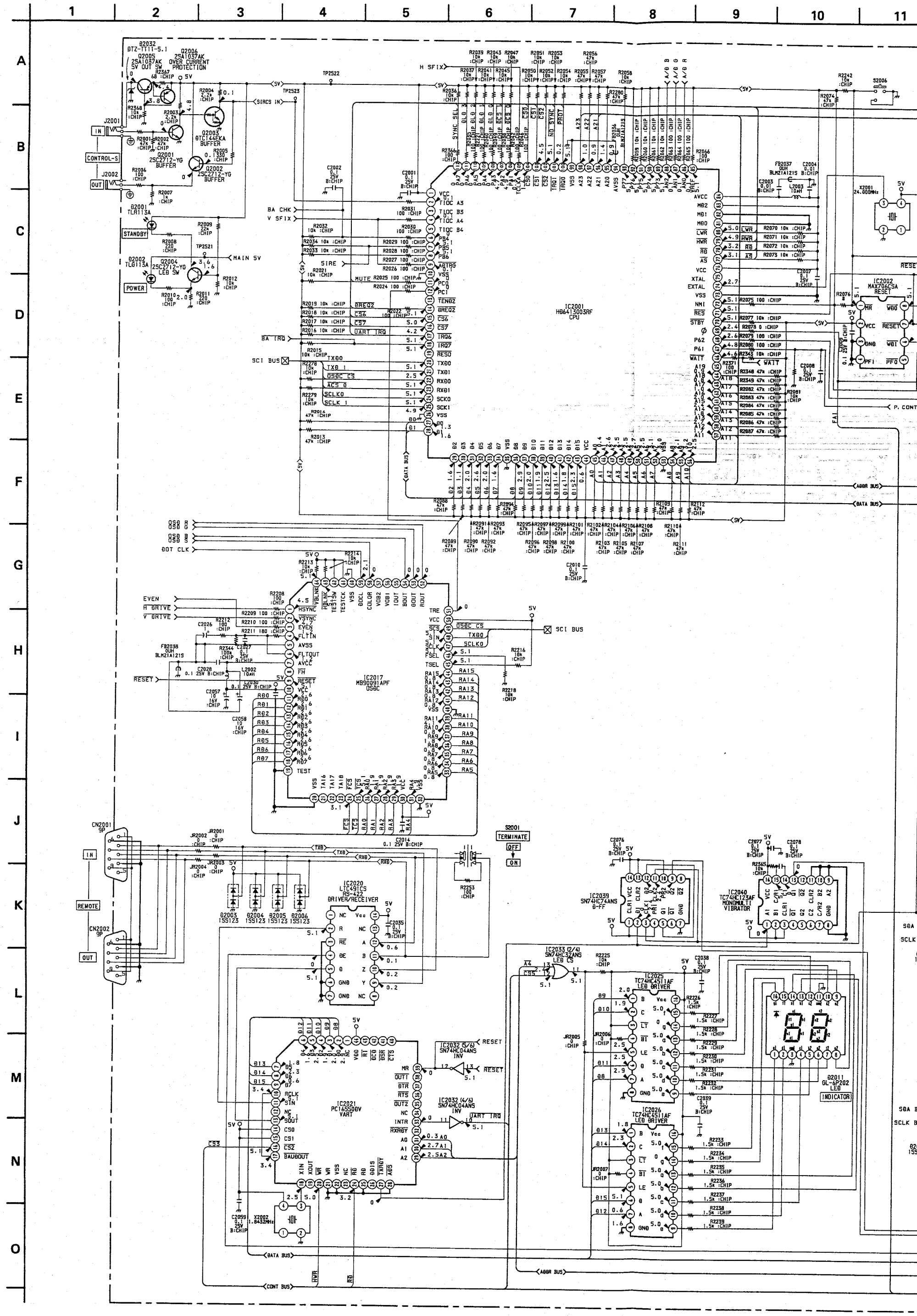


M -B SIDE-

1-664-148-21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A
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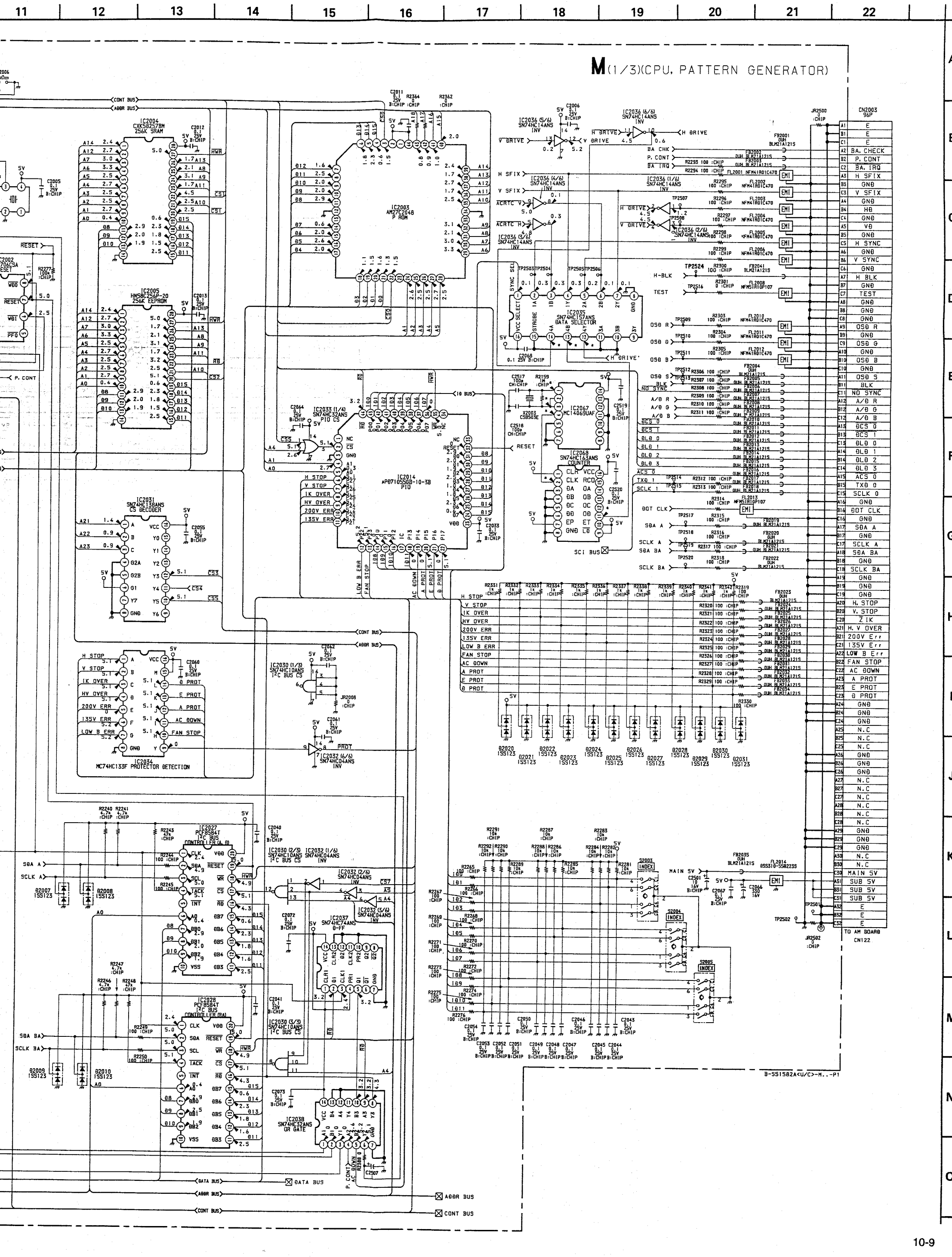
C
D
E
F
G
H
I
J
K
L
M
N
O
D2032 DTZ-TT11-5.1
Q2005 2SA1037AK 5V OUT SW
Q2006 2SA1037AK OVER CURRENT PROTECTION
Q2003 DTC144EKA BUFFER
Q2001 2SC2712-YG BUFFER
Q2002 2SC2712-YG BUFFER
J2001
IN
CONTROL-S
J2002
OUT
D2001 TLR113A
STANDBY
D2002 TLG113A
Q2004 2SC2712-YG LED SW
POWER
MAIN 5V
SIRCS IN
TP2522
TP2523
TP2521
H SFIX
BA CHK
V SFIX
BA IRQ
SCI BUS
IC2001 HD6413003RF CPU
X2001 24.000MHz
IC2002 MAX706CSA RESET
S2006
P. CONT
ADDR BUS
DATA BUS
OSD R
OSD G
OSD B
OSD S
DOT CLK
EVEN
H DRIVE
V DRIVE
RESET
IC2017 MB90091APF OSDC
SCI BUS
CN2001 9P
IN
REMOTE
CN2002 9P
OUT
S2001 TERMINATE
OFF
ON
D2003 1SS123
D2004 1SS123
D2005 1SS123
D2006 1SS123
IC2020 LTC491CS RS-422 DRIVER/RECEIVER
IC2021 PC16550DV UART
X2002 1.8432MHz
IC2032 (5/6) SN74HC04ANS
IC2032 (4/6) SN74HC04ANS INV
UART IRQ
IC2033 (2/4) SN74HC32ANS LED CS
IC2025 TC74HC4511AF LED DRIVER
IC2026 TC74HC4511AF LED DRIVER
D2011 GL-4P202 LED
INDICATOR
IC2039 SN74HC74ANS D-FF
IC2040 TC74HC123AF MONOMULTI VIBRATOR
DATA BUS
ADDR BUS
CONT BUS

M(1/3)(CPU, PATTERN GENERATOR)
11
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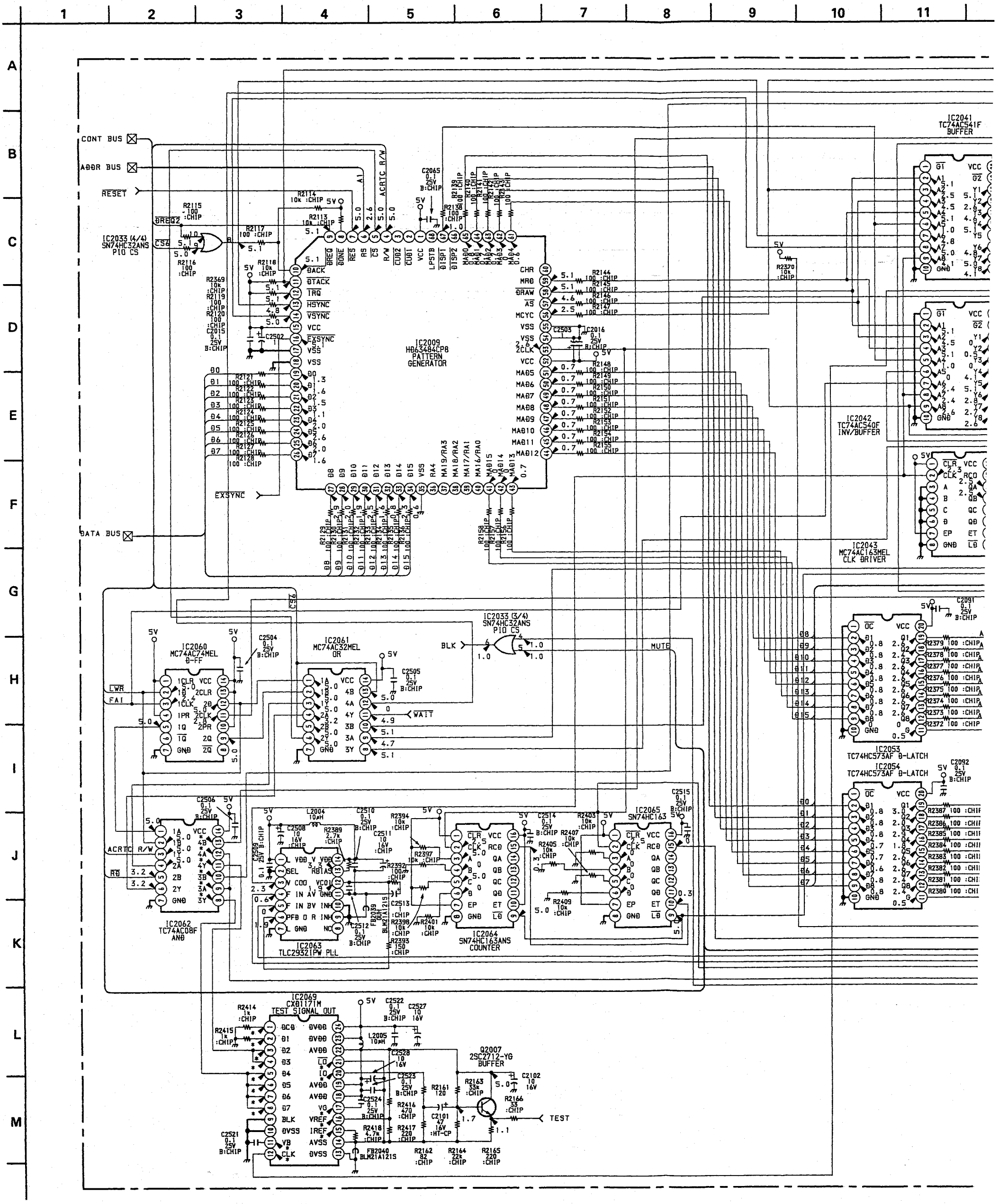
22
IC2004 CXK58257BM 256K SRAM
IC2005 HN58C256P-20 256K EEPROM
IC2003 AM27C2048 P ROM
IC2014 μPD71055GB-10-3B PIO
IC2033 (1/4) SN74HC32ANS PIO CS
IC2031 SN74HC138ANS CS DECODER
IC2034 MC74HC133F PROTECTOR DETECTION
IC2030 (1/3) SN74HC10ANS I²C BUS CS
IC2032 (6/6) SN74HC04ANS INV
IC2027 PCF8584T I²C BUS CONTROLLER (A, B)
IC2028 PCF8584T I²C BUS CONTROLLER (BA)
IC2037 SN74HC74ANS D-FF
IC2038 SN74HC32ANS OR GATE
IC2036 (5/6) SN74HC14ANS INV
IC2036 (6/6) SN74HC14ANS INV
IC2036 (4/6) SN74HC14ANS INV
IC2036 (3/6) SN74HC14ANS INV
IC2036 (1/6) SN74HC14ANS INV
IC2036 (2/6) SN74HC14ANS INV
IC2035 SN74HC157ANS DATA SELECTOR
IC2067 MC14069UAF
IC2068 SN74HC163ANS COUNTER
X2003 CSB503E
S2003 INDEX
S2004 INDEX
S2005 INDEX
CN2003 96P
TO AM BOARD CN122
CONT BUS
ADDR BUS
DATA BUS
I0 BUS
SCI BUS
H DRIVE
V DRIVE
H SFIX
V SFIX
ACRTC V
ACRTC H
BA CHK
P. CONT
BA IRQ
H-BLK
TEST
OSD R
OSD G
OSD B
OSD S
BLK
NO SYNC
A/D R
A/D G
A/D B
DCS 0
DCS 1
DLD 0
DLD 1
DLD 2
DLD 3
ACS 0
TXD 1
SCLK 1
DOT CLK
SDA A
SCLK A
SDA BA
SCLK BA
H STOP
V STOP
IK OVER
HV OVER
200V ERR
135V ERR
LOW B ERR
FAN STOP
AC DOWN
A PROT
E PROT
D PROT
MAIN 5V
SUB 5V
E
BA. CHECK
P. CONT
BA. IRQ
H SFIX
GND
HD
VD
H SYNC
V SYNC
H BLK
TEST
OSD R
OSD G
OSD B
OSD S
BLK
NO SYNC
A/D R
A/D G
A/D B
DCS 0
DCS 1
DLD 0
DLD 1
DLD 2
DLD 3
ACS 0
TXD 0
SCLK 0
DOT CLK
SDA A
SCLK A
SDA BA
SCLK BA
H. STOP
V. STOP
Z IK
H. V OVER
200V Err
135V Err
LOW B Err
FAN STOP
AC DOWN
A PROT
E PROT
D PROT
N.C
MAIN 5V
SUB 5V
D2020 1SS123
D2021 1SS123
D2022 1SS123
D2023 1SS123
D2024 1SS123
D2025 1SS123
D2026 1SS123
D2027 1SS123
D2028 1SS123
D2029 1SS123
D2030 1SS123
D2031 1SS123
D2007 1SS123
D2008 1SS123
D2009 1SS123
D2010 1SS123
B-SS1582A<U/C>-M..-P1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A
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D
E
F
G
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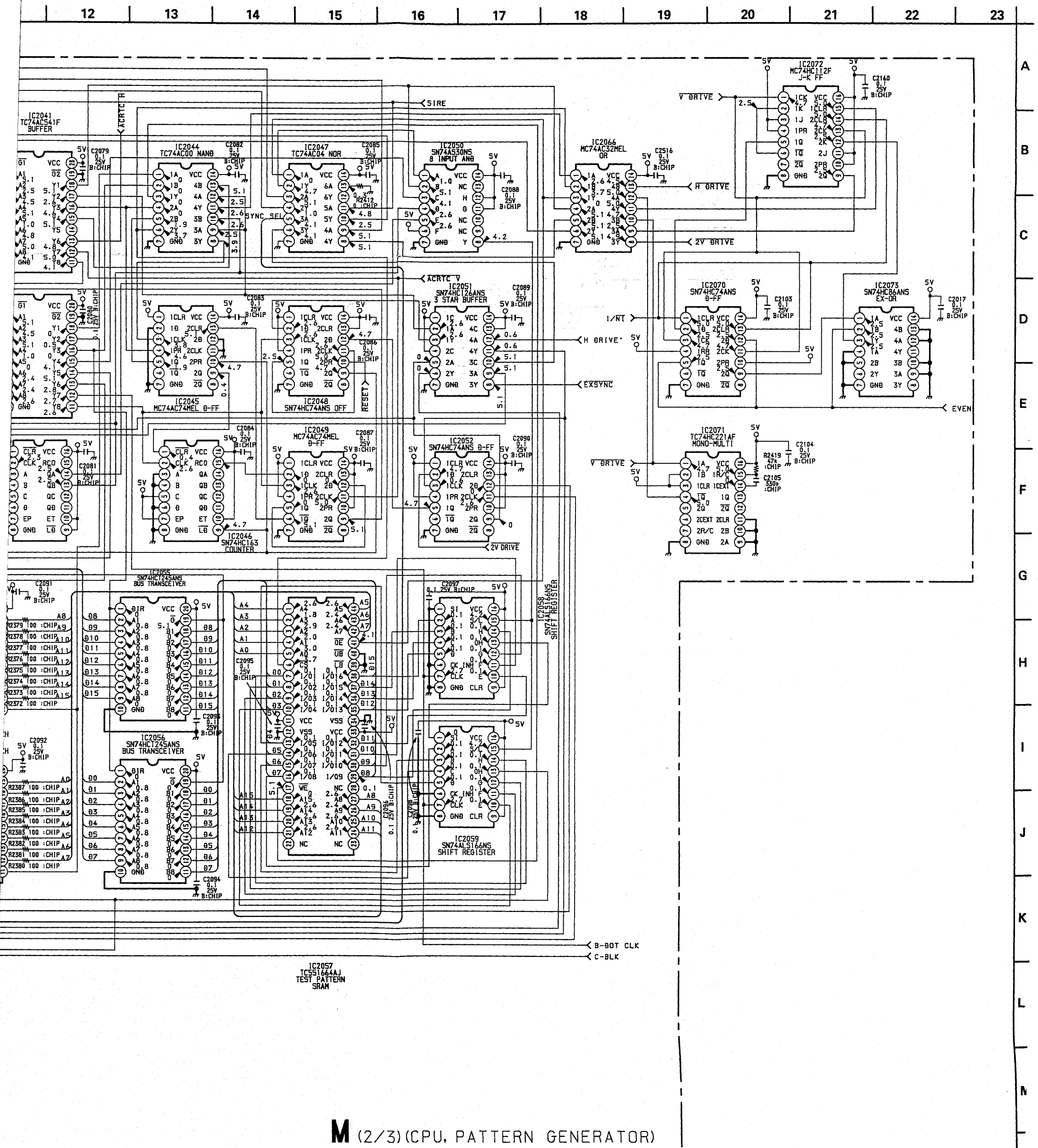
I
J
K
L
M
CONT BUS
ADDR BUS
RESET
DATA BUS
EXSYNC
IC2033 (4/4)
SN74HC32ANS
PIO CS
IC2009
HD63484CP8
PATTERN
GENERATOR
IC2041
TC74AC541F
BUFFER
IC2042
TC74AC540F
INV/BUFFER
IC2043
MC74AC163MEL
CLK DRIVER
IC2033 (3/4)
SN74HC32ANS
PIO CS
BLK
MUTE
IC2060
MC74AC74MEL
D-FF
IC2061
MC74AC32MEL
OR
WAIT
LWR
FAI
IC2053
TC74HC573AF D-LATCH
IC2054
TC74HC573AF D-LATCH
IC2062
TC74AC08F
AND
ACRTC R/W
RD
IC2063
TLC2932IPW PLL
IC2064
SN74HC163ANS
COUNTER
IC2065
SN74HC163
IC2069
CXD1171M
TEST SIGNAL OUT
Q2007
2SC2712-YG
BUFFER
TEST
5V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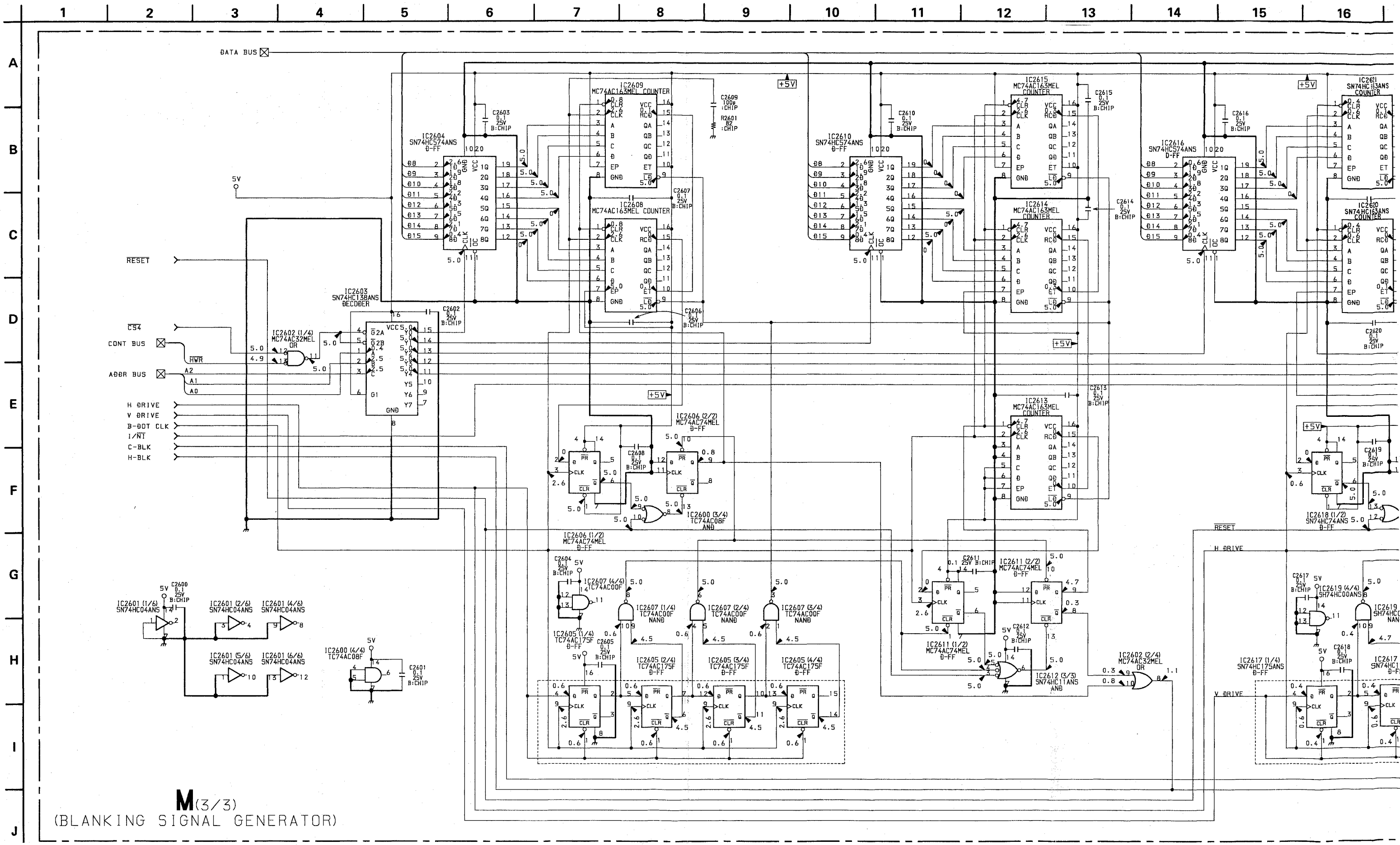
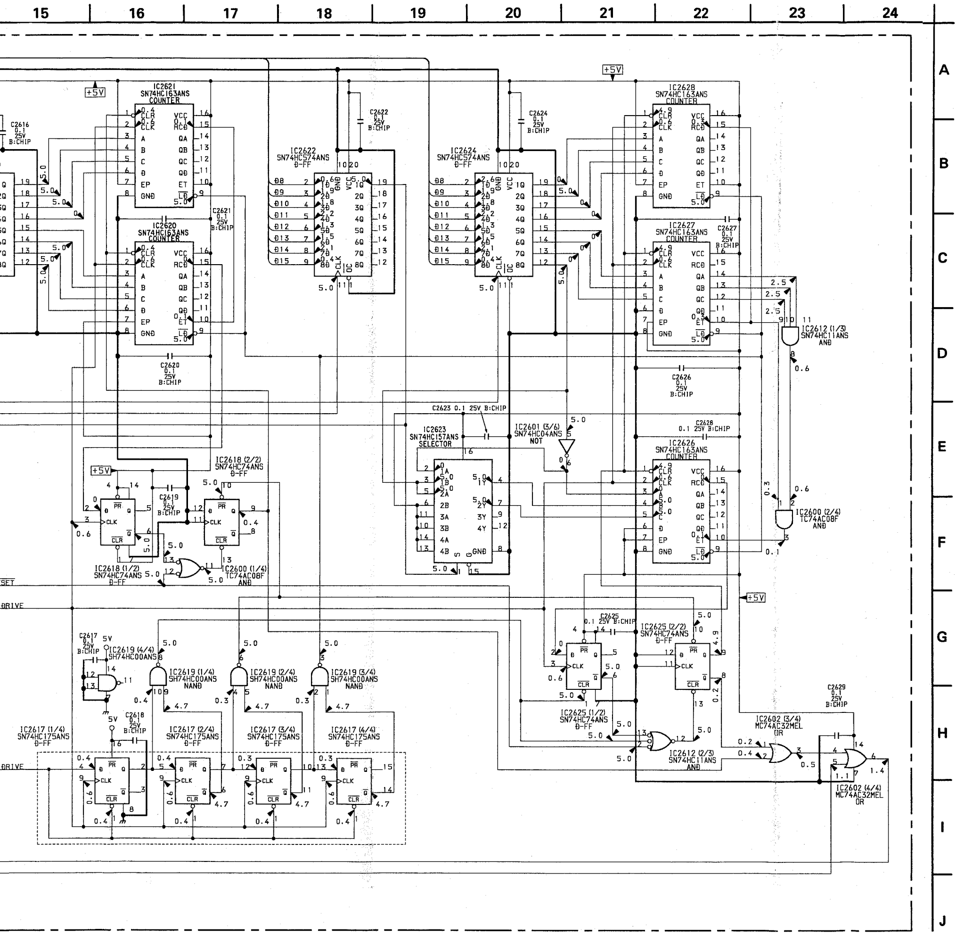
23
A
B
C
D
E
F
G
H
I
J
K
L
M
IC2041
TC74AC541F
BUFFER
IC2044
TC74AC00 NAND
IC2047
TC74AC04 NOR
IC2050
SN74AS30NS
8 INPUT AND
IC2066
MC74AC32MEL
OR
IC2072
MC74HC112F
J-K FF
IC2045
MC74AC74MEL D-FF
IC2048
SN74HC74ANS DFF
IC2051
SN74HC126ANS
3 STAR BUFFER
IC2070
SN74HC74ANS
D-FF
IC2073
SN74HC86ANS
EX-OR
IC2046
SN74HC163
COUNTER
IC2049
MC74AC74MEL
D-FF
IC2052
SN74HC74ANS D-FF
IC2071
TC74HC221AF
MONO-MULTI
IC2055
SN74HCT245ANS
BUS TRANSCEIVER
IC2056
SN74HCT245ANS
BUS TRANSCEIVER
IC2058
SN74ALS166NS
SHIFT REGISTER
IC2059
SN74ALS166NS
SHIFT REGISTER
IC2057
TC551664AJ
TEST PATTERN
SRAM
SIRE
ACRTC H
ACRTC V
SYNC SEL
V DRIVE
H DRIVE
2V DRIVE
I/NT
H DRIVE'
EXSYNC
EVEN
RESET
B-DOT CLK
C-BLK
5V

M (2/3)(CPU, PATTERN GENERATOR)


DATA BUS
CONT BUS
ADDR BUS
RESET
CS4
HWR
A2
A1
A0
H DRIVE
V DRIVE
B-DOT CLK
I/NT
C-BLK
H-BLK
5V
+5V
IC2603
SN74HC138ANS
DECODER
IC2602 (1/4)
MC74AC32MEL
OR
IC2604
SN74HC574ANS
D-FF
IC2609
MC74AC163MEL COUNTER
IC2608
MC74AC163MEL COUNTER
C2609
100p
:CHIP
R2601
82
:CHIP
IC2610
SN74HC574ANS
D-FF
IC2615
MC74AC163MEL
COUNTER
IC2614
MC74AC163MEL
COUNTER
IC2613
MC74AC163MEL
COUNTER
IC2616
SN74HC574ANS
D-FF
IC2621
SN74HC163ANS
COUNTER
IC2620
SN74HC163ANS
COUNTER
IC2606 (2/2)
MC74AC74MEL
D-FF
IC2606 (1/2)
MC74AC74MEL
D-FF
IC2600 (3/4)
TC74AC08F
AND
IC2600 (4/4)
TC74AC08F
IC2607 (4/4)
TC74AC00F
IC2607 (1/4)
TC74AC00F
NAND
IC2607 (2/4)
TC74AC00F
NAND
IC2607 (3/4)
TC74AC00F
NAND
IC2605 (1/4)
TC74AC175F
D-FF
IC2605 (2/4)
TC74AC175F
D-FF
IC2605 (3/4)
TC74AC175F
D-FF
IC2605 (4/4)
TC74AC175F
D-FF
IC2611 (1/2)
MC74AC74MEL
D-FF
IC2611 (2/2)
MC74AC74MEL
D-FF
IC2612 (3/3)
SN74HC11ANS
AND
IC2602 (2/4)
MC74AC32MEL
OR
IC2601 (1/6)
SN74HC04ANS
IC2601 (2/6)
SN74HC04ANS
IC2601 (4/6)
SN74HC04ANS
IC2601 (5/6)
SN74HC04ANS
IC2601 (6/6)
SN74HC04ANS
IC2618 (1/2)
SN74HC74ANS
D-FF
IC2619 (4/4)
SN74HC00ANS
IC2617 (1/4)
SN74HC175ANS
D-FF
C2600
C2601
C2602
C2603
C2604
C2605
C2606
C2607
C2608
C2610
C2611
C2612
C2614
C2616
C2617
C2618
C2619
C2620
0.1
25V
B:CHIP

M(3/3)
(BLANKING SIGNAL GENERATOR)


15
16
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22
23
24
A
B
C
D
E
F
G
H
I
J
+5V
IC2621 SN74HC163ANS COUNTER
IC2620 SN74HC163ANS COUNTER
C2616 0.1 25V B:CHIP
C2621 0.1 25V B:CHIP
C2620 0.1 25V B:CHIP
IC2622 SN74HC574ANS D-FF
C2622 0.1 25V B:CHIP
IC2624 SN74HC574ANS D-FF
C2624 0.1 25V B:CHIP
D8
D9
D10
D11
D12
D13
D14
D15
IC2628 SN74HC163ANS COUNTER
IC2627 SN74HC163ANS COUNTER
C2627 0.1 25V B:CHIP
C2626 0.1 25V B:CHIP
IC2612 (1/3) SN74HC11ANS AND
C2623 0.1 25V B:CHIP
IC2623 SN74HC157ANS SELECTOR
IC2601 (3/6) SN74HC04ANS NOT
C2628 0.1 25V B:CHIP
IC2626 SN74HC163ANS COUNTER
IC2600 (2/4) TC74AC08F AND
IC2618 (2/2) SN74HC74ANS D-FF
C2619 0.1 25V B:CHIP
IC2618 (1/2) SN74HC74ANS D-FF
IC2600 (1/4) TC74AC08F AND
RESET
DRIVE
C2617 0.1 25V B:CHIP
IC2619 (4/4) SN74HC00ANS
IC2619 (1/4) SN74HC00ANS NAND
IC2619 (2/4) SN74HC00ANS NAND
IC2619 (3/4) SN74HC00ANS NAND
C2618 0.1 25V B:CHIP
IC2617 (1/4) SN74HC175ANS D-FF
IC2617 (2/4) SN74HC175ANS D-FF
IC2617 (3/4) SN74HC175ANS D-FF
IC2617 (4/4) SN74HC175ANS D-FF
DRIVE
C2625 0.1 25V B:CHIP
IC2625 (2/2) SN74HC74ANS D-FF
IC2625 (1/2) SN74HC74ANS D-FF
IC2612 (2/3) SN74HC11ANS AND
IC2602 (3/4) MC74AC32MEL OR
C2629 0.1 25V B:CHIP
IC2602 (4/4) MC74AC32MEL OR
B-SS1582A<U/C>-M..-P3

D BOARD

*: B SIDE

*CN5000	E-1
*CN5001	F-2
*CN5002	E-2
*CN5003	E-2
*CN5004	D-2
*CN5005	F-2
*CN5006	E-2
*CN5007	E-2
*CN5008	D-2
*CN5009	F-2
*CN5010	E-2
*CN5011	E-2
*CN5012	D-2
*CN5013	F-3
*CN5014	E-3
*CN5015	E-3
*CN5016	F-3
*CN5017	E-3
*CN5018	E-3
*CN5019	F-4
*CN5020	E-4
*CN5021	E-4
*CN5022	F-4
*CN5023	E-4
*CN5024	E-4
*CN5025	F-4
*CN5026	E-4
*CN5027	E-4
*CN5028	F-5
*CN5029	E-5
*CN5030	E-5
*CN5037	E-9
*CN5038	C-6
*CN5039	B-9
*CN5040	B-9
*CN5041	A-9
*D5004	C-1
*D5005	C-1
*D5008	E-6
*IC5001	C-1
IC5002	D-3
IC5003	A-1
IC5004	A-1
IC5005	B-4
IC5006	D-3
IC5007	D-3
IC5008	D-3
IC5009	D-4
IC5010	D-4
IC5011	D-4
IC5012	A-3
IC5013	A-4
IC5014	A-3
IC5015	A-4
IC5016	A-3
IC5017	A-4
IC5018	B-5
IC5019	A-5
IC5020	D-5
IC5021	A-2
IC5022	B-3
IC5023	B-5
IC5024	B-3
IC5025	A-4
IC5026	A-2
*IC5027	C-2
*IC5028	B-2
IC5029	B-2
IC5030	A-2
IC5031	B-2
IC5032	B-2
*IC5033	D-3
*IC5034	D-4
IC5035	D-2
IC5036	A-3
IC5037	D-2
IC5038	C-1
IC5039	D-2
IC5040	D-2
IC5042	G-5
IC5044	G-5
IC5045	G-2
IC5047	G-2
IC5049	G-3
*IC5051	C-9
*IC5052	C-6
*IC5053	F6
*IC5054	F-9
*IC5055	F-8
*IC5056	F7
IC5057	F-6
IC5060	B-1
*IC5061	B-1
IC5062	B-1
*IC5063	B-1
IC5064	E-6
IC5065	E-6
IC5066	D-5
IC5067	B-3
*L5001	C-2
*L5002	C-2
*L5003	C-3
*L5004	B-4
*L5005	B-4
*L5006	B-5
*L5007	B-4
*L5008	C-3
*L5009	C-3
*L5010	G-6
*L5011	G-9
*L5012	G-8
*L5013	G-7
*L5014	C-5
*L5015	C-5
*L5016	G-4
*L5017	F-5
*L5018	E-5
*L5019	G-4
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Q5002	B-1
*Q5003	C-1
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Q5005	C-2
Q5006	A-1
Q5015	F-4
Q5016	F-4
Q5017	F-4
Q5018	F-4
Q5019	F-5
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Q5021	F-5
Q5022	F-5
Q5023	F-4
Q5024	F-4
Q5025	F-4
Q5026	F-4
Q5027	F-5
Q5028	F-5
Q5029	F-5
Q5030	F-5
*Q5032	F-1
*Q5033	F-1
*Q5034	F-1
*Q5035	F-1
*Q5036	E-1
*Q5037	E-1
*Q5038	F-1
*Q5039	F-1
Q5040	B-4
Q5041	B-4
Q5042	B-1
*Q5043	B-1
*Q5044	B-1
*Q5045	C-1
*Q5046	E-6
*Q5047	E-6
*RV5001	C-1
*RV5002	C-1
*RV5003	C-1
TP5001	D-1
TP5002	D-1
TP5003	D-1
TP5004	C-2
TP5005	B-2
TP5006	B-3
TP5007	C-2
TP5008	C-2
TP5009	B-5
TP5010	D-3
TP5011	D-2
TP5012	D-3
TP5013	D-3
TP5014	D-3
TP5015	D-3
TP5016	G-5
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TP5018	D-4
TP5019	D-4
TP5020	D-5
TP5021	D-4
TP5022	D-2
TP5023	D-2
TP5024	F-4
TP5025	F-3
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TP5027	F-3
TP5028	F-5
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TP5039	F-3
TP5040	F-3
TP5041	F-2
TP5042	F-2
TP5043	F-2
TP5044	C-5
TP5045	G-6
TP5046	G-3
TP5047	G-3
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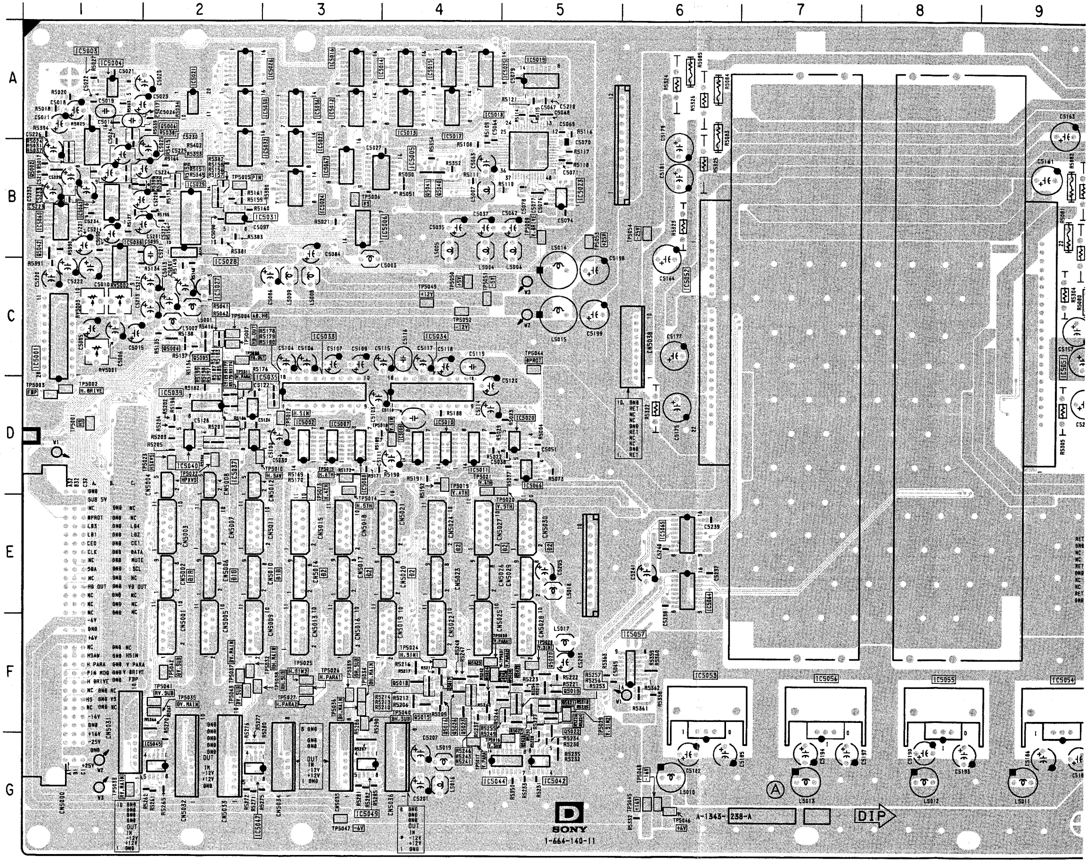
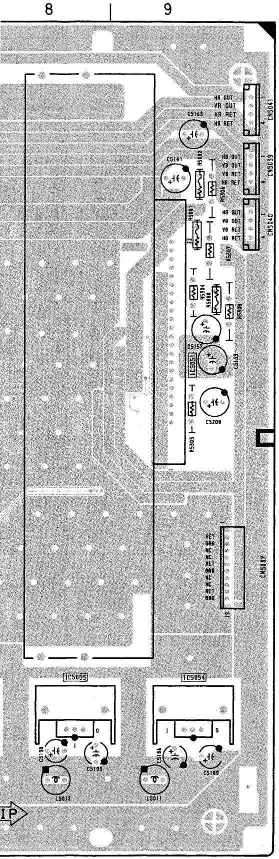
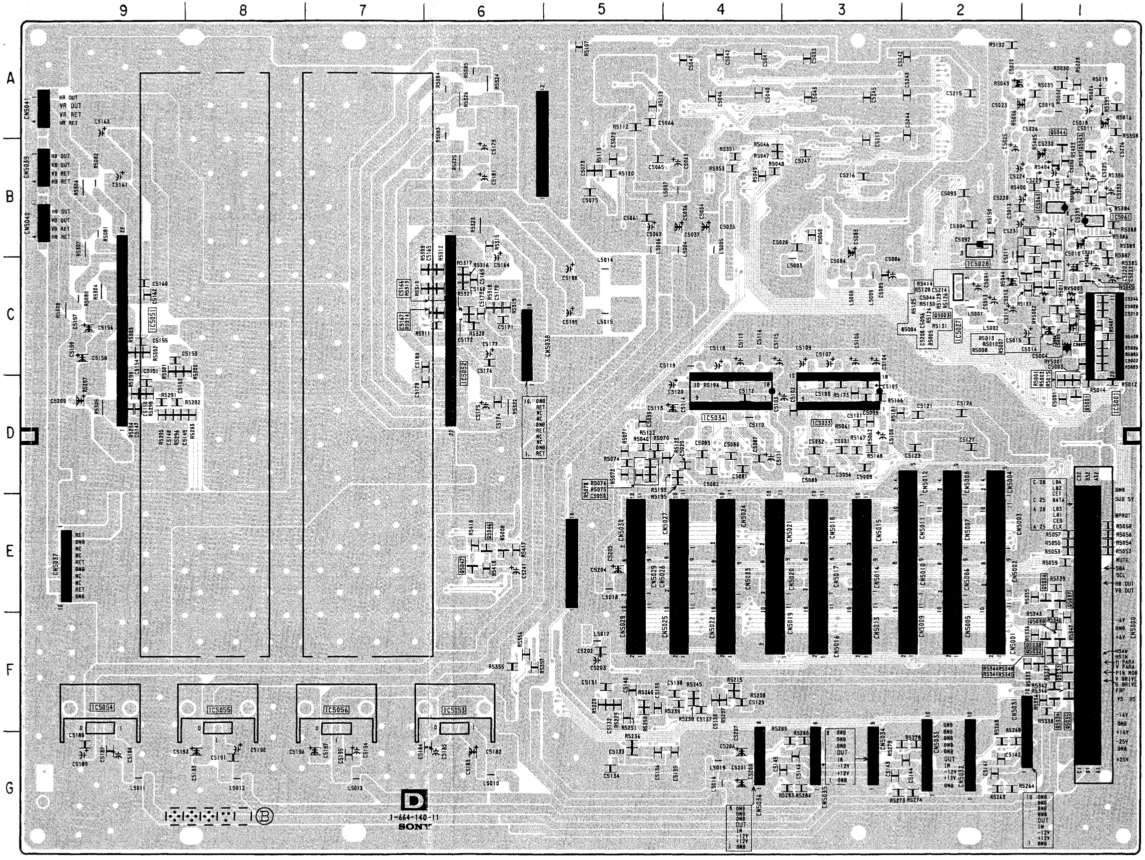
TP5053	B-5
TP5054	B-6



D -
1-664


8
9
CN5041
CN5039
CN5040
CN5037
HR OUT
VR OUT
VR RET
HR RET
HB OUT
VB OUT
VB RET
HB RET
C5163
C5161
C5157
C5159
C5209
IC5051
IC5055
IC5054
C5190
C5193
C5186
C5189
L5012
L5011

D -A SIDE-
1-664-140-11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CN5041
CN5039
CN5040
CN5037
CN5038
CN5030
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CN5018
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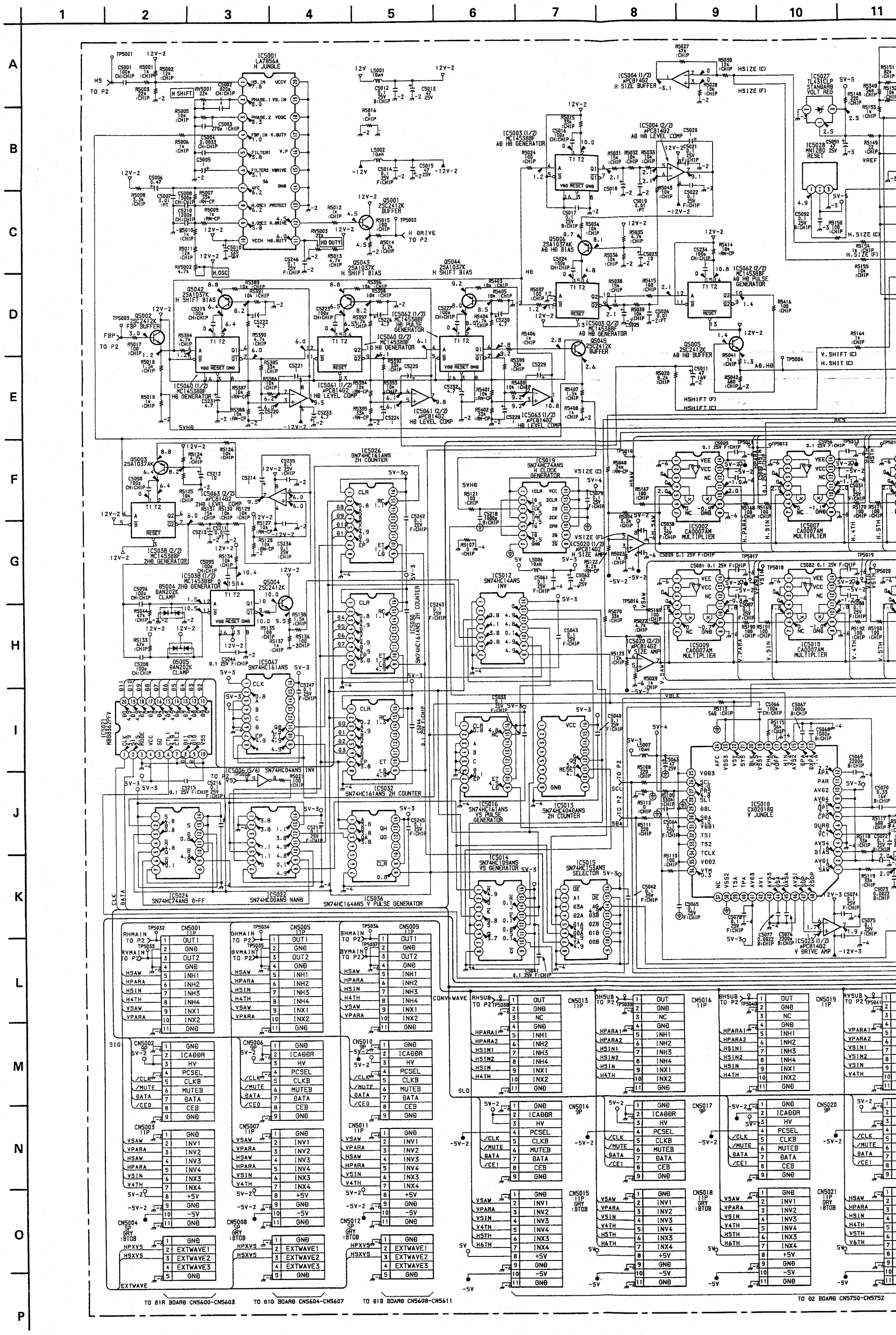
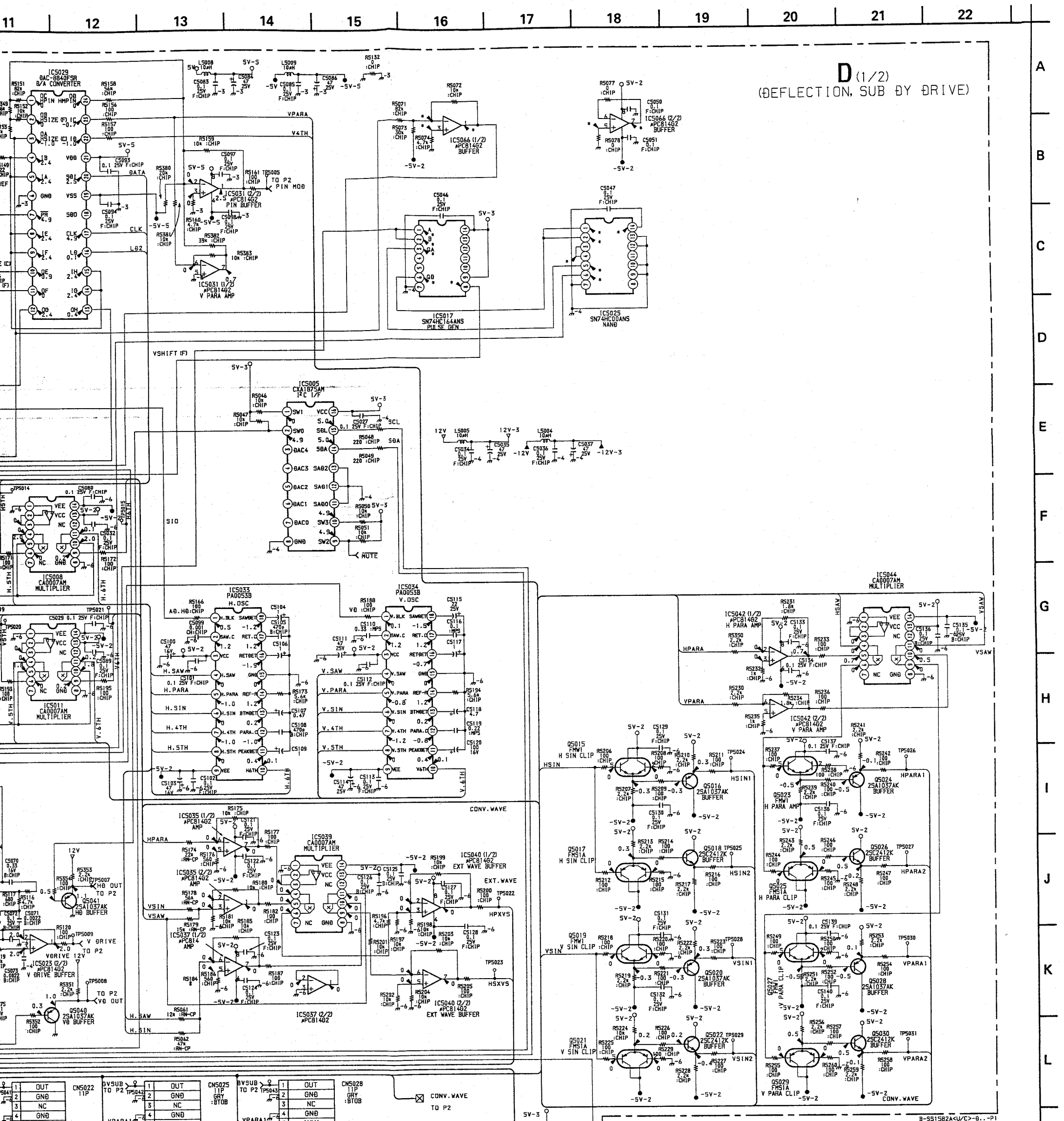
CN5006
CN5005
CN5004
CN5003
CN5002
CN5001
CN5000
CN5031
CN5032
CN5033
CN5034
CN5035
CN5036
IC5051
IC5052
IC5053
IC5054
IC5055
IC5056
IC5028
IC5033
IC5034
IC5061
HR OUT
VR OUT
VR RET
HR RET
HB OUT
VB OUT
VB RET
HB RET
GND
SUB SY
DATA
CLK
MUTE
SDA
SCL
HD OUT
VD OUT
-6V
+6V
+5V
HSAW
HSIN
H PARA
V PARA
PIN MOD
V DRIVE
H DRIVE
FRP
-14V
+14V
-25V
+25V
-12V
+12V
D
1-664-140-11
SONY

D -B SIDE-
1-664-140-11


IC5001 LA7856A H JUNGLE
HS TO P2
H SHIFT
H DUTY
H.OSC
Q5001 2SC2412K BUFFER
H DRIVE TO P2
Q5042 2SA1037K H SHIFT BIAS
Q5043 2SA1037K H SHIFT BIAS
Q5044 2SA1037K H SHIFT BIAS
Q5002 2SC2412K FBP BUFFER
FBP TO P2
IC5060 (1/2) MC14538BF H0 GENERATOR
IC5061 (1/2) μPC814G2 H0 LEVEL COMP
IC5060 (2/2) MC14538BF H0 GENERATOR
IC5062 (1/2) MC14538BF H0 PULSE GENERATOR
IC5061 (2/2) μPC814G2 H0 LEVEL COMP
IC5063 (1/2) μPC814G2 H0 LEVEL COMP
SVH0
IC5003 (1/2) MC14538BF A0 H0 GENERATOR
IC5004 (1/2) μPC814G2 H SIZE BUFFER
IC5004 (2/2) μPC814G2 A0 H0 LEVEL COMP
Q5006 2SA1037AK A0 H0 BIAS
IC5003 (2/2) MC14538BF A0 H0 GENERATOR
Q5045 2SC2412K BUFFER
IC5062 (2/2) MC14538BF A0 H0 PULSE GENERATOR
Q5005 2SC2412K A0 H0 BUFFER
HSIZE (C)
HSIZE (F)
HSHIFT (F)
HSHIFT (C)
V.SHIFT (C)
H.SHIT (C)
IC5027 TL431CLP STANDARD VOLT REG
IC5028 MN1280 RESET
VREF
H.SIZE (C)
H.SIZE (F)
Q5003 2SA1037AK
IC5063 (2/2) μPC814G2 2H0 LEVEL COMP
IC5038 (2/2) MC14538BF 2H0 GENERATOR
IC5038 (1/2) MC14538BF 2H0 GENERATOR
D5004 0AN202K CLAMP
D5005 0AN202K CLAMP
Q5004 2SC2412K
IC5067 SN74HC161ANS
IC5026 SN74HC161ANS 2H COUNTER
IC5030 SN74HC161ANS 2H COUNTER
IC5032 SN74HC161ANS 2H COUNTER
IC5036 SN74HC164ANS V PULSE GENERATOR
IC5021 MB88362PFV
IC5006 (5/6) SN74HC04ANS INV
IC5024 SN74HC74ANS 0-FF
IC5022 SN74HC00ANS NAN0
IC5019 SN74HC74ANS H CLOCK GENERATOR
IC5012 SN74HC14ANS INV
IC5020 (1/2) μPC814G2 H SIZE AMP
IC5020 (2/2) μPC814G2 V SIZE AMP
IC5016 SN74HC161ANS VS PULSE GENERATOR
IC5013 SN74HC4040ANS 2H COUNTER
IC5014 SN74HC109ANS VS GENERATOR
IC5015 SN74HC153ANS SELECTOR
IC5002 CA0007AM MULTIPLIER
IC5007 CA0007AM MULTIPLIER
IC5009 CA0007AM MULTIPLIER
IC5010 CA0007AM MULTIPLIER
IC5018 CXD2018Q V JUNGLE
IC5023 (1/2) μPC814G2 V DRIVE AMP
VSIZE (C)
VSIZE (F)
VBLK
RES
CLK
DATA
CN5001 11P
CN5005 11P
CN5009 11P
CN5002 9P
CN5006 9P
CN5010 9P
CN5003 11P
CN5007 11P
CN5011 11P
CN5004 5P GRY :BTOB
CN5008 5P GRY :BTOB
CN5012 5P GRY :BTOB
CN5013 11P
CN5016 11P
CN5019 11P
CN5014 9P
CN5017 9P
CN5020 9P
CN5015 11P GRY :BTOB
CN5018 11P GRY :BTOB
CN5021 11P GRY :BTOB
OUT1 GND OUT2 GND INH1 INH2 INH3 INH4 INX1 INX2 GND
GND ICADDR HV PCSEL CLKB MUTEB DATA CEB GND
GND INV1 INV2 INV3 INV4 INX3 INX4 +5V GND -5V GND
GND EXTWAVE1 EXTWAVE2 EXTWAVE3 GND
OUT GND NC GND INH1 INH2 INH3 INH4 INX1 INX2 GND
RHMAIN TO P2
RVMAIN TO P2
GHMAIN TO P2
GVMAIN TO P2
BHMAIN TO P2
BVMAIN TO P2
RHSUB TO P2
GHSUB TO P2
BHSUB TO P2
RVSUB TO P2
CONV WAVE
EXTWAVE
TO 01R BOARD CN5600-CN5603
TO 01G BOARD CN5604-CN5607
TO 01B BOARD CN5608-CN5611
TO 02 BOARD CN5750-CN5752
1 2 3 4 5 6 7 8 9 10 11
A B C D E F G H I J K L M N O P

D (1/2)
(DEFLECTION, SUB DY DRIVE)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M
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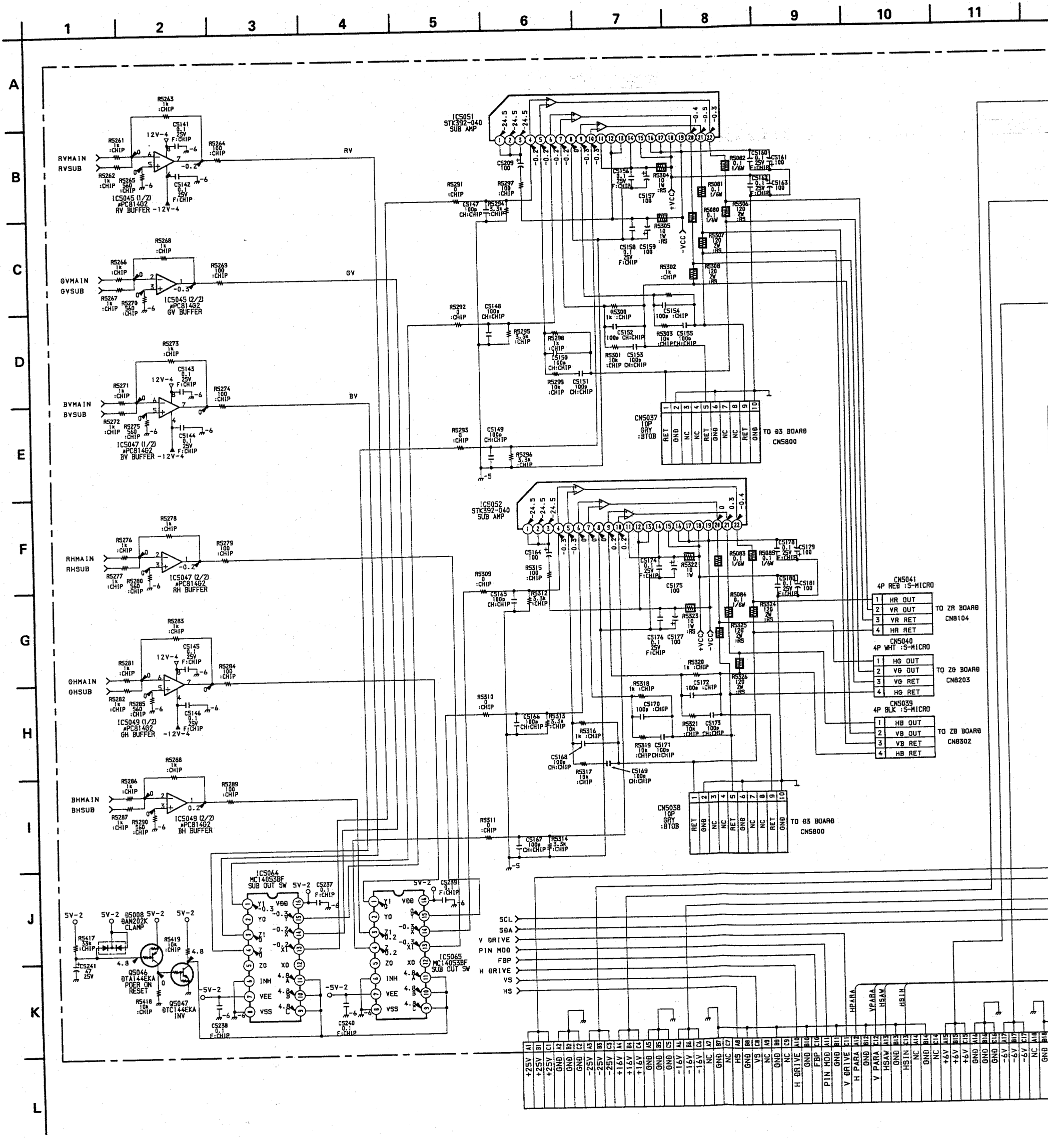
O
P
IC5029 DAC-8840FSR D/A CONVERTER
IC5031 (2/2) μPC814G2 PIN BUFFER
IC5031 (1/2) μPC814G2 V PARA AMP
TO P2 PIN MOD
IC5066 (1/2) μPC814G2 BUFFER
IC5066 (2/2) μPC814G2 BUFFER
IC5017 SN74HC164ANS PULSE GEN
IC5025 SN74HC00ANS NAND
IC5005 CXA1875AM I²C I/F
IC5008 CA0007AM MULTIPLIER
IC5011 CA0007AM MULTIPLIER
IC5033 PA0053B H.OSC
IC5034 PA0053B V.OSC
IC5044 CA0007AM MULTIPLIER
IC5042 (1/2) μPC814G2 H PARA AMP
IC5042 (2/2) μPC814G2 V PARA AMP
IC5035 (1/2) μPC814G2 AMP
IC5035 (2/2) μPC814G2 AMP
IC5037 (1/2) μPC814G2 AMP
IC5037 (2/2) μPC814G2
IC5039 CA0007AM MULTIPLIER
IC5040 (1/2) μPC814G2 EXT WAVE BUFFER
IC5040 (2/2) μPC814G2 EXT WAVE BUFFER
IC5023 (2/2) μPC814G2 V DRIVE BUFFER
Q5041 2SA1037AK HD BUFFER
Q5040 2SA1037AK VD BUFFER
Q5015 FMW1 H SIN CLIP
Q5016 2SA1037AK BUFFER
Q5017 FMS1A H SIN CLIP
Q5018 2SC2412K BUFFER
Q5019 FMW1 V SIN CLIP
Q5020 2SA1037AK BUFFER
Q5021 FMS1A V SIN CLIP
Q5022 2SC2412K BUFFER
Q5023 FMW1 H PARA AMP
Q5024 2SA1037AK BUFFER
Q5025 FMS1A H PARA CLIP
Q5026 2SC2412K BUFFER
Q5027 FMW1 V PARA CLIP
Q5028 2SA1037AK BUFFER
Q5029 FMS1A V PARA CLIP
Q5030 2SC2412K BUFFER
IC5006 (1/6) SN74HC04ANS
IC5006 (2/6) SN74HC04ANS
IC5006 (3/6) SN74HC04ANS
IC5006 (4/6) SN74HC04ANS INV
IC5006 (6/6) SN74HC04ANS INV
CN5022 11P
CN5023 9P
CN5024 11P GRY :BTOB
CN5025 11P GRY :BTOB
CN5026 9P GRY :BTOB
CN5027 11P GRY :BTOB
CN5028 11P GRY :BTOB
CN5029 9P GRY :BTOB
CN5030 11P GRY :BTOB
CONV.WAVE TO P2
VSHIFT (F)
HD OUT TO P2
V DRIVE TO P2
VD OUT TO P2
MUTE
B-SS15B2A<U/C>-B..-P1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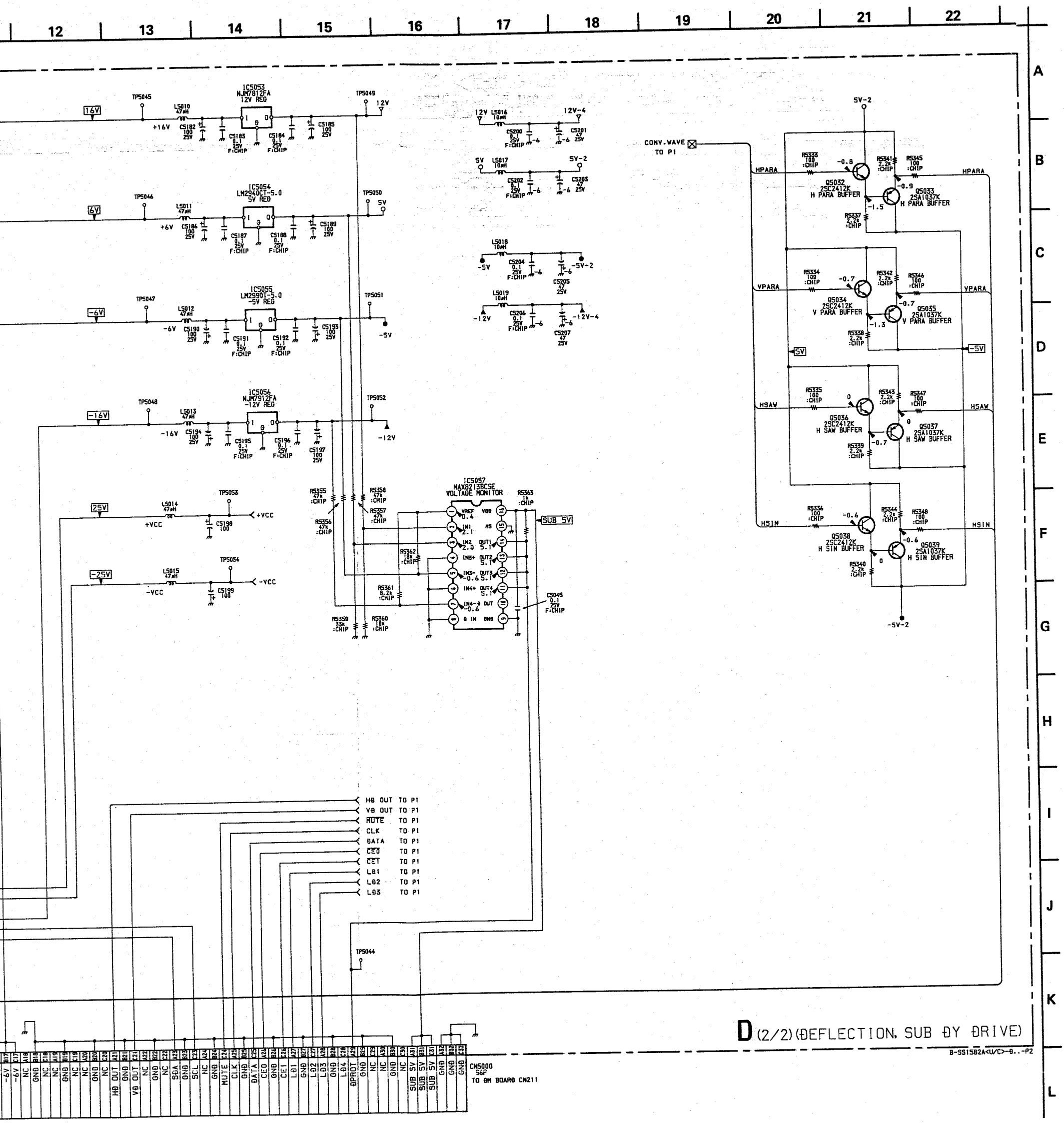
K
L
RVMAIN
RVSUB
IC5045 (1/2)
μPC814G2
RV BUFFER -12V-4
GVMAIN
GVSUB
IC5045 (2/2)
μPC814G2
GV BUFFER
BVMAIN
BVSUB
IC5047 (1/2)
μPC814G2
BV BUFFER -12V-4
RHMAIN
RHSUB
IC5047 (2/2)
μPC814G2
RH BUFFER
GHMAIN
GHSUB
IC5049 (1/2)
μPC814G2
GH BUFFER -12V-4
BHMAIN
BHSUB
IC5049 (2/2)
μPC814G2
BH BUFFER
RV
GV
BV
IC5051
STK392-040
SUB AMP
IC5052
STK392-040
SUB AMP
+VCC
-VCC
CN5037
10P
GRY
:BTOB
RET
GND
NC
RET
GND
NC
RET
GND
TO 03 BOARD
CN5800
CN5038
10P
GRY
:BTOB
TO 03 BOARD
CN5800
CN5041
4P RED :S-MICRO
HR OUT
VR OUT
VR RET
HR RET
TO ZR BOARD
CN8104
CN5040
4P WHT :S-MICRO
HG OUT
VG OUT
VG RET
HG RET
TO ZG BOARD
CN8203
CN5039
4P BLK :S-MICRO
HB OUT
VB OUT
VB RET
HB RET
TO ZB BOARD
CN8302
IC5064
MC14053BF
SUB OUT SW
IC5065
MC14053BF
SUB OUT SW
Y1
Y0
Z1
Z
Z0
INH
VEE
VSS
VDD
X1
X0
5V-2
-5V-2
D5008
DAN202K
CLAMP
Q5046
DTA144EKA
POER ON
RESET
Q5047
DTC144EKA
INV
R5417 33k :CHIP
C5241 47 25V
R5418 10k :CHIP
R5419 10k :CHIP
C5237 0.1 F:CHIP
C5238 0.1 F:CHIP
C5239 0.1 F:CHIP
C5240 0.1 F:CHIP
SCL
SDA
V DRIVE
PIN MOD
FBP
H DRIVE
VS
HS
HPARA
VPARA
HSAW
HSIN
A1 B1 C1 A2 B2 C2 A3 B3 C3 A4 B4 C4 A5 B5 C5 A6 B6 C6 A7 B7 C7 A8 B8 C8 A9 B9 C9 A10 B10 C10 A11 B11 C11 A12 B12 C12 A13 B13 C13 A14 B14 C14 A15 B15 C15 A16 B16 C16 A17 B17 C17 A18 B18
+25V
+25V
+25V
GND
GND
GND
-25V
-25V
-25V
+16V
+16V
+16V
GND
GND
GND
-16V
-16V
-16V
NC
GND
NC
HS
GND
VS
NC
GND
NC
H DRIVE
GND
FBP
PIN MOD
GND
V DRIVE
H PARA
GND
V PARA
HSAW
GND
HSIN
NC
GND
NC
+6V
+6V
+6V
GND
GND
GND
-6V
-6V
-6V
NC
GND


IC5053 NJM7812FA 12V REG
IC5054 LM2940CT-5.0 5V REG
IC5055 LM2990T-5.0 -5V REG
IC5056 NJM7912FA -12V REG
IC5057 MAX8213BCSE VOLTAGE MONITOR
16V
6V
-6V
-16V
25V
-25V
+VCC
-VCC
SUB 5V
CONV.WAVE TO P1
HPARA
VPARA
HSAW
HSIN
Q5032 2SC2412K H PARA BUFFER
Q5033 2SA1037K H PARA BUFFER
Q5034 2SC2412K V PARA BUFFER
Q5035 2SA1037K V PARA BUFFER
Q5036 2SC2412K H SAW BUFFER
Q5037 2SA1037K H SAW BUFFER
Q5038 2SC2412K H SIN BUFFER
Q5039 2SA1037K H SIN BUFFER
5V-2
-5V-2
HD OUT TO P1
VD OUT TO P1
MUTE TO P1
CLK TO P1
DATA TO P1
CE0 TO P1
CE1 TO P1
LD1 TO P1
LD2 TO P1
LD3 TO P1
CN5000 56P TO DM BOARD CN211
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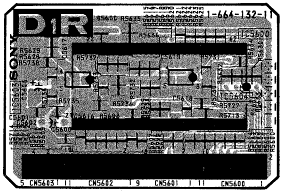
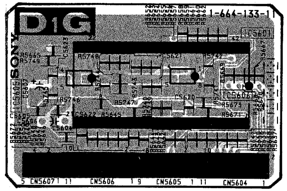
D (2/2)(DEFLECTION, SUB DY DRIVE)

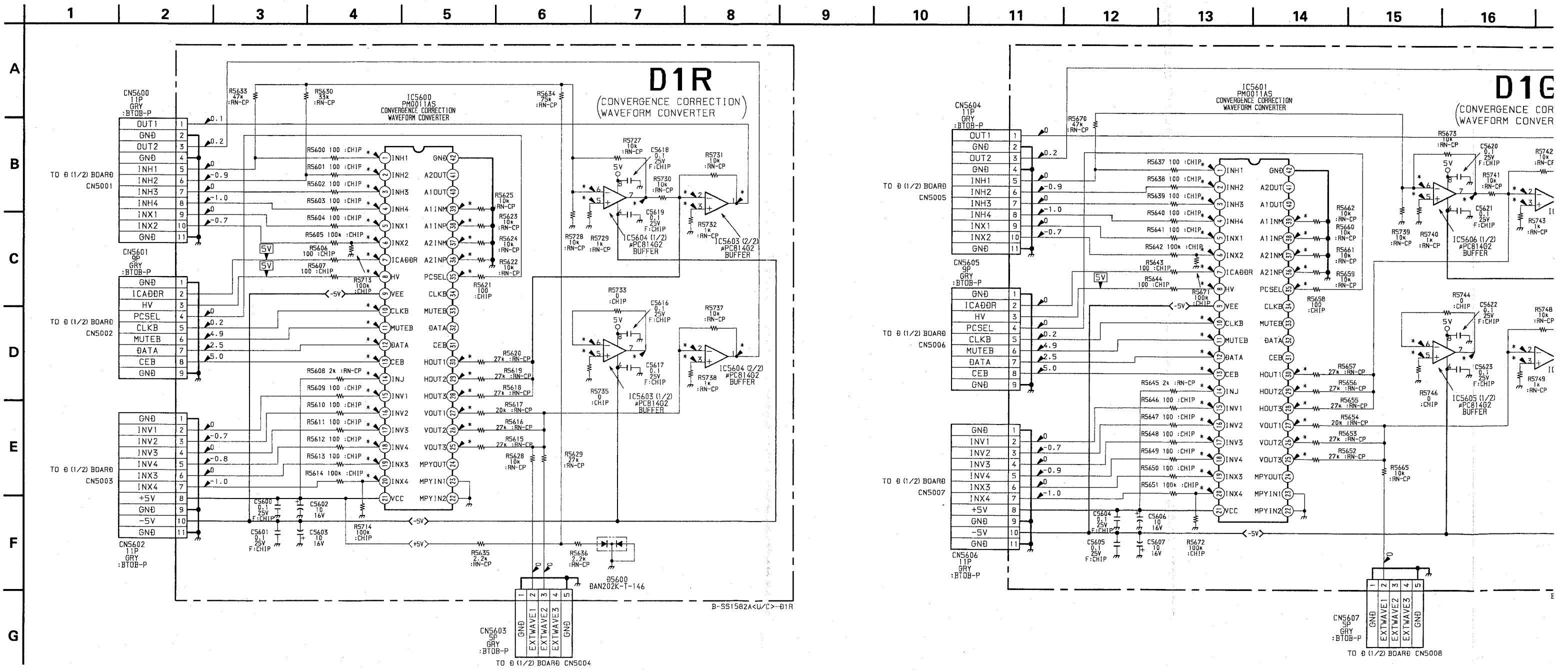
B-SS1582A<U/C>-B..-P2


D1R
SONY
1-664-132-11
IC5600
IC5604
CN5603
CN5602
CN5601
CN5600

D1R -B SIDE-
1-664-132-11


D1G
SONY
1-664-133-11
IC5601
IC5606
CN5607
CN5606
CN5605
CN5604

D1G -B SIDE-
1-664-133-11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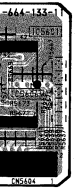
D1R
(CONVERGENCE CORRECTION WAVEFORM CONVERTER)
IC5600 PM0011AS CONVERGENCE CORRECTION WAVEFORM CONVERTER
CN5600 11P GRY :BTOB-P
OUT1
GND
OUT2
INH1
INH2
INH3
INH4
INX1
INX2
TO D (1/2) BOARD CN5001
CN5601 9P GRY :BTOB-P
ICADDR
HV
PCSEL
CLKB
MUTEB
DATA
CEB
TO D (1/2) BOARD CN5002
INV1
INV2
INV3
INV4
INX3
INX4
+5V
-5V
CN5602 11P GRY :BTOB-P
TO D (1/2) BOARD CN5003
IC5604 (1/2) μPC814G2 BUFFER
IC5603 (2/2) μPC814G2 BUFFER
IC5603 (1/2) μPC814G2 BUFFER
IC5604 (2/2) μPC814G2 BUFFER
D5600 DAN202K-T-146
CN5603 5P GRY :BTOB-P
GND
EXTWAVE1
EXTWAVE2
EXTWAVE3
TO D (1/2) BOARD CN5004
B-SS1582A<U/C>-D1R
D1G
(CONVERGENCE CORRECTION WAVEFORM CONVER
IC5601 PM0011AS CONVERGENCE CORRECTION WAVEFORM CONVERTER
CN5604 11P GRY :BTOB-P
TO D (1/2) BOARD CN5005
CN5605 9P GRY :BTOB-P
TO D (1/2) BOARD CN5006
TO D (1/2) BOARD CN5007
CN5606 11P GRY :BTOB-P
IC5606 (1/2) μPC814G2 BUFFER
IC5605 (1/2) μPC814G2 BUFFER
CN5607 5P GRY :BTOB-P
TO D (1/2) BOARD CN5008



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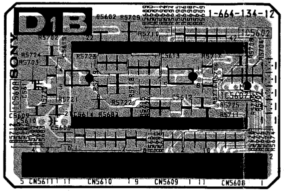
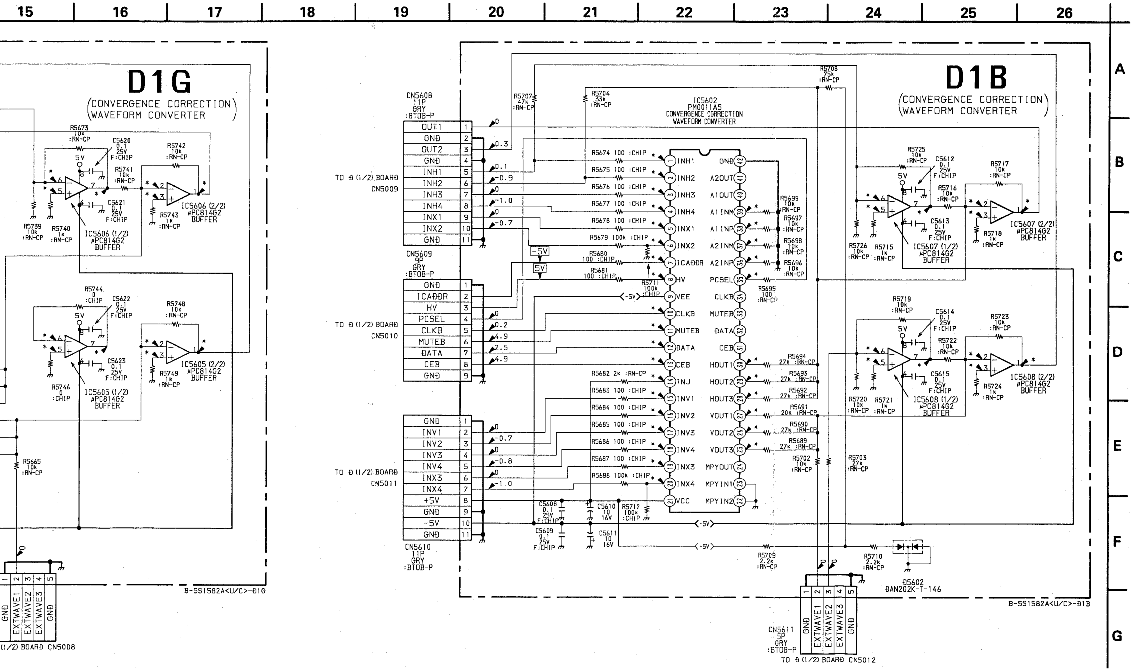
IC5601
CN5604

-B SIDE-
33-11



D1B
SONY
1-664-134-12
IC5602
IC5607
CN5611
CN5610
CN5609
CN5608

D1B -B SIDE-
1-664-134-12



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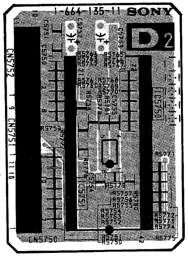
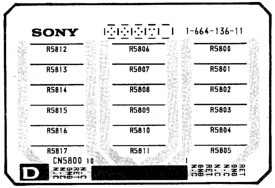
D1G
(CONVERGENCE CORRECTION WAVEFORM CONVERTER)
IC5606 (1/2) μPC814G2 BUFFER
IC5606 (2/2) μPC814G2 BUFFER
IC5605 (1/2) μPC814G2 BUFFER
IC5605 (2/2) μPC814G2 BUFFER
TO Ð (1/2) BOARD CN5008
B-SS1582A<U/C>-D1G
D1B
(CONVERGENCE CORRECTION WAVEFORM CONVERTER)
IC5602 PM0011AS CONVERGENCE CORRECTION WAVEFORM CONVERTER
CN5608 11P GRY :BTOB-P
OUT1
GND
OUT2
INH1
INH2
INH3
INH4
INX1
INX2
TO Ð (1/2) BOARD CN5009
CN5609 9P GRY :BTOB-P
ICADDR
HV
PCSEL
CLKB
MUTEB
DATA
CEB
TO Ð (1/2) BOARD CN5010
INV1
INV2
INV3
INV4
INX3
INX4
+5V
-5V
TO Ð (1/2) BOARD CN5011
CN5610 11P GRY :BTOB-P
VEE
VCC
A2OUT
A1OUT
A1INM
A1INP
A2INM
A2INP
HOUT1
HOUT2
HOUT3
VOUT1
VOUT2
VOUT3
MPYOUT
MPYIN1
MPYIN2
IC5607 (1/2) μPC814G2 BUFFER
IC5607 (2/2) μPC814G2 BUFFER
IC5608 (1/2) μPC814G2 BUFFER
IC5608 (2/2) μPC814G2 BUFFER
D5602 DAN202K-T-146
CN5611 5P GRY :BTOB-P
EXTWAVE1
EXTWAVE2
EXTWAVE3
TO Ð (1/2) BOARD CN5012
B-SS1582A<U/C>-D1B

D2, D3, DM


1-664-135-11
SONY
D2
CN5752
CN5751
CN5750
IC5750
IC5751
R5759
R5771
R5773
R5775

D2 -B SIDE-
1-664-135-11


SONY
1-664-136-11
R5812
R5813
R5814
R5815
R5816
R5817
R5806
R5807
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R5809
R5810
R5811
R5800
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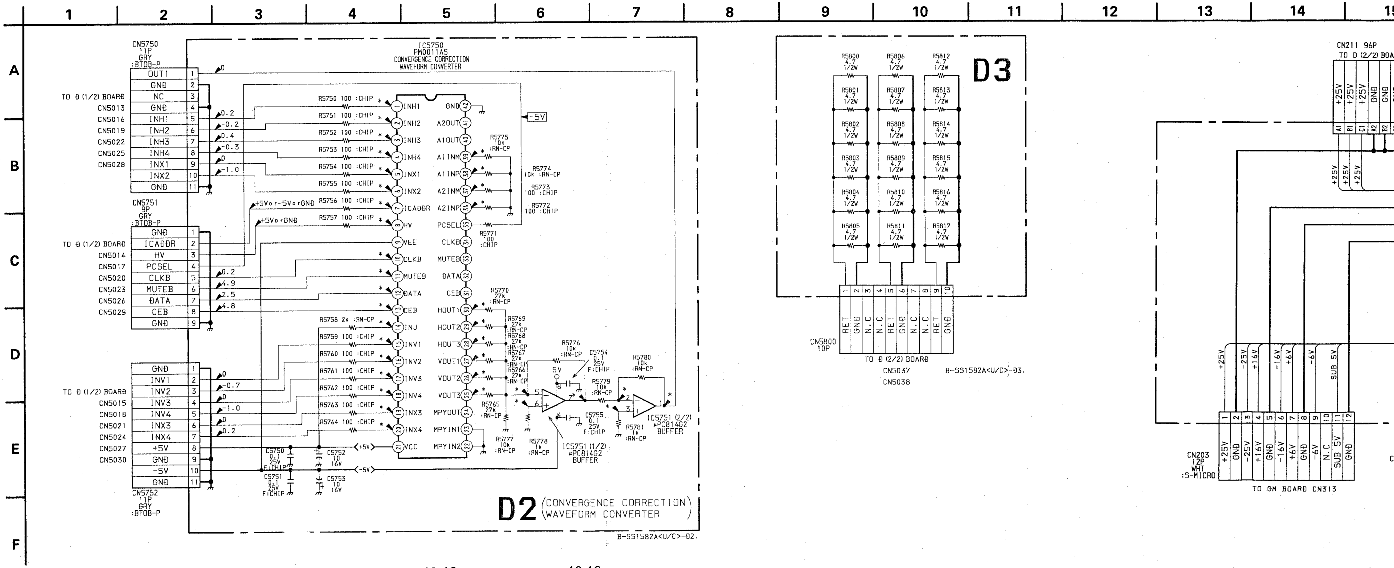
R5803
R5804
R5805
CN5800
D

D3 -B SIDE-
1-664-136-11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A
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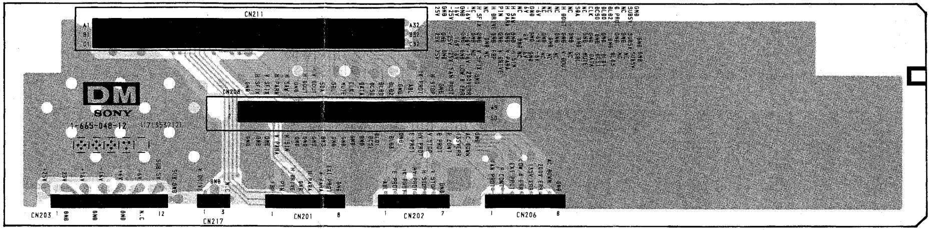
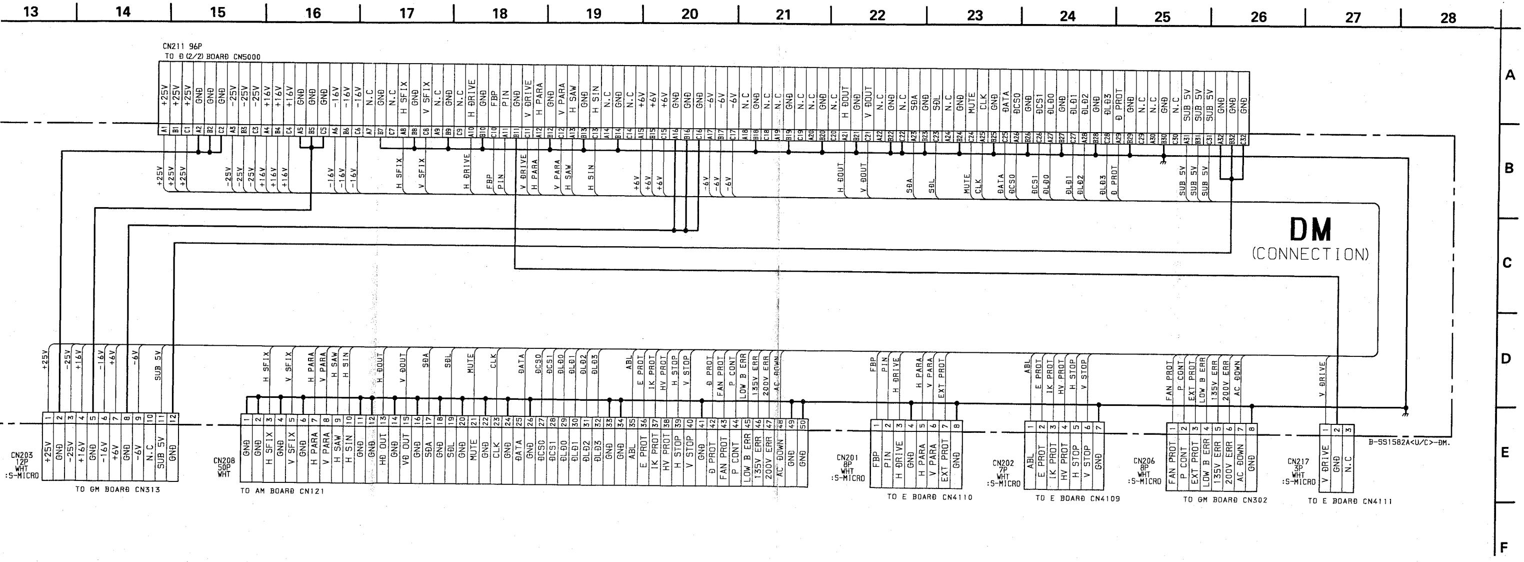
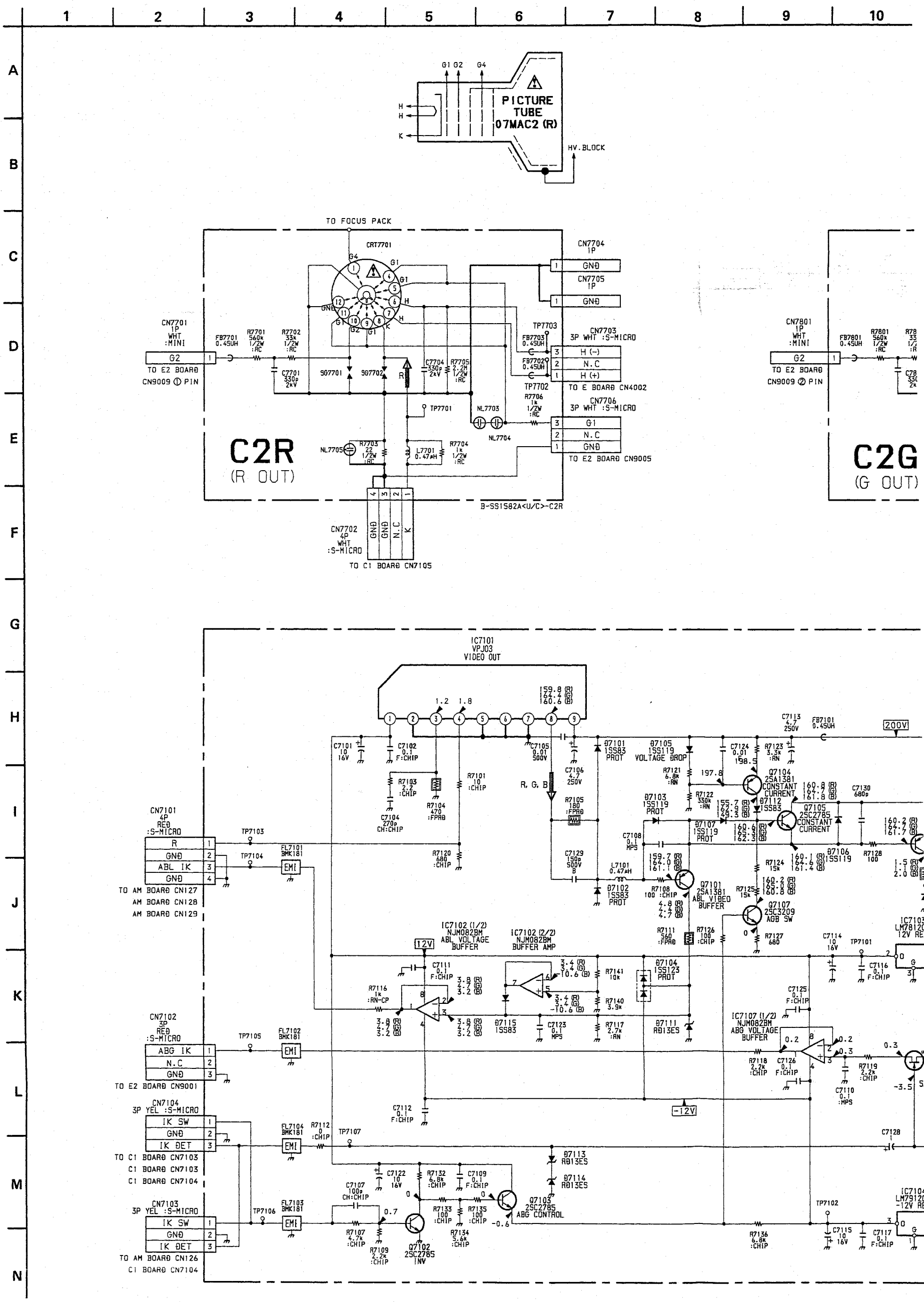
F
CN5750 11P GRY :BTOB-P
TO D (1/2) BOARD
CN5013
CN5016
CN5019
CN5022
CN5025
CN5028
OUT1
GND
NC
GND
INH1
INH2
INH3
INH4
INX1
INX2
GND
CN5751 9P GRY :BTOB-P
CN5014
CN5017
CN5020
CN5023
CN5026
CN5029
ICADDR
HV
PCSEL
CLKB
MUTEB
DATA
CEB
CN5015
CN5018
CN5021
CN5024
CN5027
CN5030
INV1
INV2
INV3
INV4
INX3
INX4
+5V
-5V
CN5752 11P GRY :BTOB-P
IC5750
PM0011AS
CONVERGENCE CORRECTION
WAVEFORM CONVERTER
R5750 100 :CHIP
R5751 100 :CHIP
R5752 100 :CHIP
R5753 100 :CHIP
R5754 100 :CHIP
R5755 100 :CHIP
R5756 100 :CHIP
R5757 100 :CHIP
+5V or -5V or GND
+5V or GND
R5758 2k :RN-CP
R5759 100 :CHIP
R5760 100 :CHIP
R5761 100 :CHIP
R5762 100 :CHIP
R5763 100 :CHIP
R5764 100 :CHIP
INJ
INV1
INV2
INV3
INV4
VCC
VEE
A2OUT
A1OUT
A1INM
A1INP
A2INM
A2INP
HOUT1
HOUT2
HOUT3
VOUT1
VOUT2
VOUT3
MPYOUT
MPYIN1
MPYIN2
-5V
R5775 10k :RN-CP
R5774 10k :RN-CP
R5773 100 :CHIP
R5772 100 :CHIP
R5771 100 :CHIP
R5770 27k :RN-CP
R5769 27k :RN-CP
R5768 27k :RN-CP
R5767 27k :RN-CP
R5766 27k :RN-CP
R5765 27k :RN-CP
R5776 10k :RN-CP
C5754 0.1 25V F:CHIP
R5780 10k :RN-CP
R5779 10k :RN-CP
C5755 0.1 25V F:CHIP
R5781 1k :RN-CP
R5777 10k :RN-CP
R5778 1k :RN-CP
IC5751 (1/2) μPC814G2 BUFFER
IC5751 (2/2) μPC814G2 BUFFER
C5750 0.1 25V F:CHIP
C5751 0.1 25V F:CHIP
C5752 10 16V
C5753 10 16V
0
0.2
-0.2
0.4
-0.3
-1.0
4.9
2.5
4.8
-0.7
D2 (CONVERGENCE CORRECTION WAVEFORM CONVERTER)
B-SS1582A<U/C>-02.
D3
R5800 4.7 1/2W
R5801 4.7 1/2W
R5802 4.7 1/2W
R5803 4.7 1/2W
R5804 4.7 1/2W
R5805 4.7 1/2W
R5806 4.7 1/2W
R5807 4.7 1/2W
R5808 4.7 1/2W
R5809 4.7 1/2W
R5810 4.7 1/2W
R5811 4.7 1/2W
R5812 4.7 1/2W
R5813 4.7 1/2W
R5814 4.7 1/2W
R5815 4.7 1/2W
R5816 4.7 1/2W
R5817 4.7 1/2W
CN5800 10P
RET
GND
N.C
TO D (2/2) BOARD
CN5037
CN5038
B-SS1582A<U/C>-03.
CN211 96P
TO D (2/2) BOA
+25V
+16V
GND
-16V
+6V
-6V
-25V
SUB 5V
N.C
CN203 12P WHT :S-MICRO
TO GM BOARD CN313

10-16


CN211
A1
B1
C1
A32
B32
C32
DM
SONY
1-665-048-12
CN208
CN203
CN217
CN201
CN202
CN206

DM -B SIDE-
1-665-048-12


13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
A
B
C
D
E
F
CN211 96P
TO D (2/2) BOARD CN5000
DM
(CONNECTION)
CN203
12P
WHT
:S-MICRO
TO GM BOARD CN313
CN208
50P
WHT
TO AM BOARD CN121
CN201
8P
WHT
:S-MICRO
TO E BOARD CN4110
CN202
7P
WHT
:S-MICRO
TO E BOARD CN4109
CN206
8P
WHT
:S-MICRO
TO GM BOARD CN302
CN217
3P
WHT
:S-MICRO
TO E BOARD CN4111
B-SS1582A<U/C>-DM.
+25V
-25V
+16V
-16V
+6V
-6V
SUB 5V
GND
N.C
H SFIX
V SFIX
H PARA
V PARA
H SAW
H SIN
H DOUT
V DOUT
SDA
SDL
MUTE
CLK
DATA
DCS0
DCS1
DLD0
DLD1
DLD2
DLD3
ABL
E PROT
IK PROT
HV PROT
H STOP
V STOP
D PROT
FAN PROT
P CONT
LOW B ERR
135V ERR
200V ERR
AC DOWN
FBP
PIN
H DRIVE
V DRIVE
EXT PROT


1
2
3
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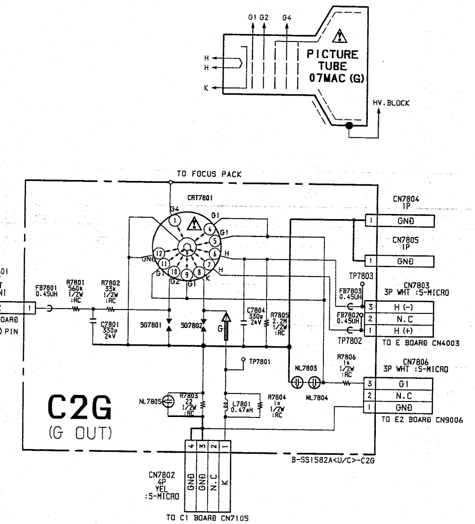
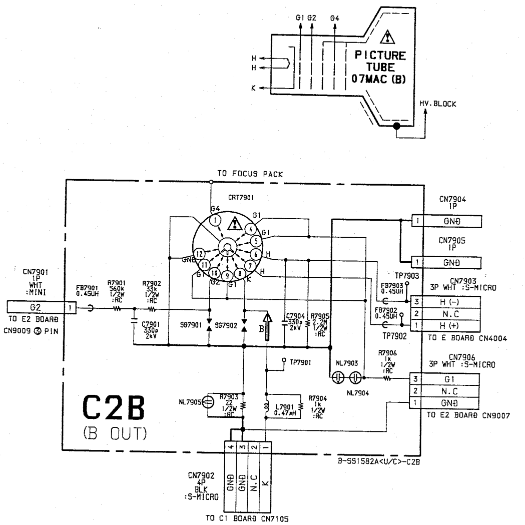
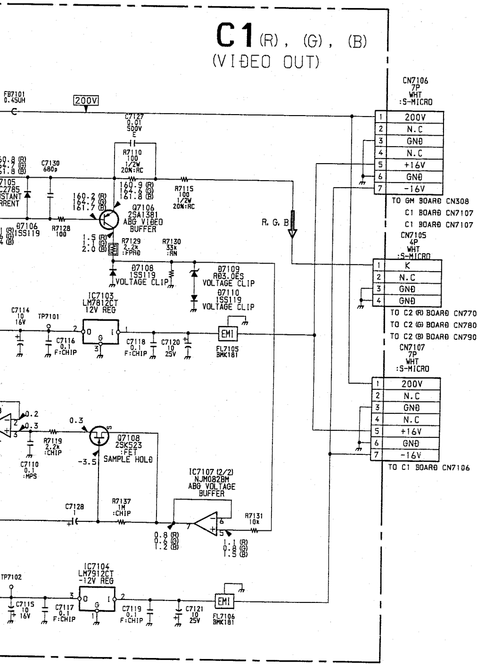
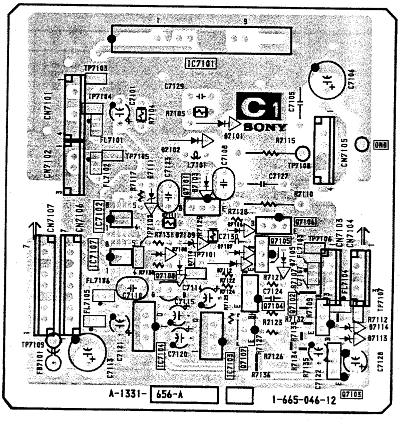
7
8
9
10
A
B
C
D
E
F
G
H
I
J
K
L
M
N
PICTURE TUBE 07MAC2 (R)
G1 G2 G4
H
H
K
HV.BLOCK
TO FOCUS PACK
CRT7701
G4
G1
G2
GND
CN7704 1P
GND
CN7705 1P
GND
CN7701 1P WHT :MINI
G2
TO E2 BOARD CN9009 ① PIN
FB7701 0.45UH
R7701 560k 1/2W :RC
R7702 33k 1/2W :RC
C7701 330p 2kV
SG7701
SG7702
C7704 330p 2kV
R7705 2.2M 1/2W :RC
TP7703
CN7703 3P WHT :S-MICRO
FB7703 0.45UH
FB7702 0.45UH
H (-)
N.C
H (+)
TP7702
TO E BOARD CN4002
TP7701
NL7703
NL7704
R7706 1k 1/2W :RC
CN7706 3P WHT :S-MICRO
G1
N.C
GND
TO E2 BOARD CN9005
C2R
(R OUT)
NL7705
R7703 22 1/2W :RC
L7701 0.47μH
R7704 1k 1/2W :RC
B-SS1582A<U/C>-C2R
CN7702 4P WHT :S-MICRO
GND
GND
N.C
K
TO C1 BOARD CN7105
CN7801 1P WHT :MINI
G2
TO E2 BOARD CN9009 ② PIN
FB7801 0.45UH
R7801 560k 1/2W :RC
C2G
(G OUT)
IC7101 VPJ03 VIDEO OUT
1.2
1.8
159.8 (R)
164.4 (G)
160.6 (B)
C7113 4.7 250V
FB7101 0.45UH
200V
C7101 10 16V
C7102 0.1 F:CHIP
C7105 0.01 500V
D7101 1SS83 PROT
D7105 1SS119 VOLTAGE DROP
C7124 0.01 250V
R7123 3.3k :RN
198.5
197.8
R7121 6.8k :RN
Q7104 2SA1381 CONSTANT CURRENT
160.8 (R)
164.7 (G)
161.8 (B)
C7130 680p
R7103 2.2 :CHIP
R7104 470 :FPRD
R7101 10 :CHIP
R, G, B
C7106 4.7 250V
R7105 180 :FPRD
D7103 1SS119 PROT
R7122 330k :RN
155.7 (R)
159.9 (G)
156.3 (B)
D7112 1SS83
Q7105 2SC2785 CONSTANT CURRENT
160.2 (R)
164.2 (G)
161.7 (B)
C7104 270p CH:CHIP
D7107 1SS119 PROT
160.6 (R)
165.3 (G)
162.3 (B)
CN7101 4P RED :S-MICRO
R
GND
ABL IK
GND
TO AM BOARD CN127
AM BOARD CN128
AM BOARD CN129
TP7103
TP7104
FL7101 BMK181
EMI
R7120 680 :CHIP
C7108 0.1 MPS
C7129 150p 500V B
L7101 0.47μH
159.7 (R)
164.0 (G)
161.1 (B)
R7124 15k
160.1 (R)
164.6 (G)
161.4 (B)
D7106 1SS119
R7128 100
1.5 (R)
2.0 (B)
D7102 1SS83 PROT
R7108 100 :CHIP
Q7101 2SA1381 ABL VIDEO BUFFER
4.8 (R)
4.4 (G)
4.7 (B)
R7125 15k
160.2 (R)
165.0 (G)
160.8 (B)
Q7107 2SC3209 ABG SW
IC7103 LM78120 12V RE
IC7102 (1/2) NJM082BM ABL VOLTAGE BUFFER
12V
IC7102 (2/2) NJM082BM BUFFER AMP
R7111 560 :FPRD
R7126 100 :CHIP
R7127 680
C7114 10 16V
TP7101
C7116 0.1 F:CHIP
C7111 0.1 F:CHIP
3.8 (R)
4.7 (G)
3.2 (B)
3.4 (R)
3.4 (G)
-10.6 (B)
R7141 10k
D7104 1SS123 PROT
R7116 1k :RN-CP
R7140 3.9k
3.8 (R)
4.7 (G)
3.2 (B)
3.8 (R)
4.7 (G)
3.2 (B)
D7115 1SS83
C7123 0.1 MPS
R7117 2.7k :RN
D7111 RD13ES
C7125 0.1 F:CHIP
IC7107 (1/2) NJM082BM ABG VOLTAGE BUFFER
0.2
0.2
0.3
0.3
CN7102 3P RED :S-MICRO
ABG IK
N.C
GND
TO E2 BOARD CN9001
TP7105
FL7102 BMK181
R7118 2.2k :CHIP
C7126 0.1 F:CHIP
R7119 2.2k :CHIP
C7110 0.1 :MPS
-3.5
-12V
C7112 0.1 F:CHIP
CN7104 3P YEL :S-MICRO
IK SW
GND
IK DET
TO C1 BOARD CN7103
C1 BOARD CN7103
C1 BOARD CN7104
FL7104 BMK181
R7112 0 :CHIP
TP7107
D7113 RD13ES
D7114 RD13ES
C7128
C7122 10 16V
R7132 6.8k :CHIP
C7109 0.1 F:CHIP
C7107 100p CH:CHIP
Q7103 2SC2785 ABG CONTROL
IC7104 LM79120 -12V RE
TP7102
CN7103 3P YEL :S-MICRO
IK SW
GND
IK DET
TO AM BOARD CN126
C1 BOARD CN7104
TP7106
FL7103 BMK181
0.7
R7133 100 :CHIP
R7135 100 :CHIP
-0.6
R7107 4.7k :CHIP
R7109 2.2k :CHIP
Q7102 2SC2785 INV
R7134 5.6k :CHIP
R7136 6.8k :CHIP
C7115 10 16V
C7117 0.1 F:CHIP

10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21


PICTURE TUBE 07MAC (G)
G1 G2 G4
H
K
HV.BLOCK
TO FOCUS PACK
CRT7801
CN7804 1P GND
CN7805 1P GND
TP7803
CN7803 3P WHT :S-MICRO
H (-)
N.C
H (+)
TP7802
TO E BOARD CN4003
FB7801 0.45UH
R7801 560k 1/2W :RC
R7802 33k 1/2W :RC
C7801 330p 2kV
SG7801
SG7802
C7804 330p 2kV
R7805 2.2M 1/2W :RC
TP7801
NL7803
R7806 1k 1/2W :RC
CN7806 3P WHT :S-MICRO
G1
N.C
GND
TO E2 BOARD CN9006
C2G
(G OUT)
NL7805
R7803 22 1/2W :RC
L7801 0.47µH
R7804 1k 1/2W :RC
NL7804
CN7802 4P YEL :S-MICRO
GND GND N.C K
TO C1 BOARD CN7105
B-SS1582A<U/C>-C2G

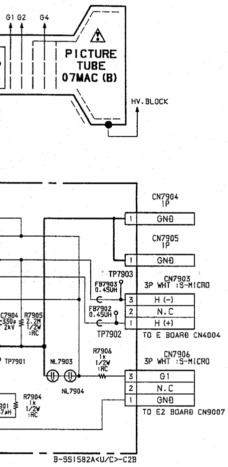

PICTURE TUBE 07MAC (B)
G1 G2 G4
H
K
HV.BLOCK
TO FOCUS PACK
CRT7901
CN7904 1P GND
CN7905 1P GND
CN7901 1P WHT :MINI
G2
TO E2 BOARD CN9009 ③ PIN
FB7901 0.45UH
R7901 560k 1/2W :RC
R7902 33k 1/2W :RC
C7901 330p 2kV
SG7901
SG7902
C7904 330p 2kV
R7905 2.2M 1/2W :RC
TP7903
CN7903 3P WHT :S-MICRO
FB7903 0.45UH
FB7902 0.45UH
H (-)
N.C
H (+)
TP7902
TO E BOARD CN4004
TP7901
NL7903
R7906 1k 1/2W :RC
CN7906 3P WHT :S-MICRO
G1
N.C
GND
NL7904
TO E2 BOARD CN9007
C2B
(B OUT)
NL7905
R7903 22 1/2W :RC
L7901 0.47µH
R7904 1k 1/2W :RC
CN7902 4P BLK :S-MICRO
GND GND N.C K
TO C1 BOARD CN7105
B-SS1582A<U/C>-C2B

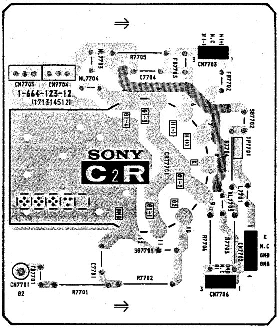

C1 (R), (G), (B)
(VIDEO OUT)
FB7101 0.45UH
200V
C7127 0.01 500V
R7110 100 1/2W 20N:RC
C7130 680p
R7115 100 1/2W 20N:RC
Q7106 2SA1381 ABG VIDEO BUFFER
R7128 100
R7129 2.2k :FPRO
R7130 33k :RN
R, G, B
D7108 1SS119 VOLTAGE CLIP
D7109 RD3.0ES VOLTAGE CLIP
D7110 1SS119 VOLTAGE CLIP
IC7103 LM7812CT 12V REG
C7114 10 16V
TP7101
C7116 0.1 F:CHIP
C7118 0.1 F:CHIP
C7120 10 25V
FL7105 BMK181
R7119 2.2k :CHIP
Q7108 2SK523 :FET SAMPLE HOLD
C7110 0.1 :MPS
IC7107 (2/2) NJM082BM ABG VOLTAGE BUFFER
C7128 1
R7137 1M :CHIP
R7131 10k
IC7104 LM7912CT -12V REG
TP7102
C7115 10 16V
C7117 0.1 F:CHIP
C7119 0.1 F:CHIP
C7121 10 25V
FL7106 BMK181
CN7106 7P WHT :S-MICRO
200V
N.C
GND
N.C
+16V
GND
-16V
TO GM BOARD CN308
C1 BOARD CN7107
C1 BOARD CN7107
CN7105 4P WHT :S-MICRO
K
N.C
GND
GND
TO C2 (R) BOARD CN7702
TO C2 (G) BOARD CN7802
TO C2 (B) BOARD CN7902
CN7107 7P WHT :S-MICRO
200V
N.C
GND
N.C
+16V
GND
-16V
TO C1 BOARD CN7106
B-SS1582A<U/C>-C1.


IC7101
C7129
TP7103
TP7104
CN7101
CN7102
FL7101
FL7102
TP7105
D7101
R7115
TP7108
CN7105
C7127
R7110
CN7107
CN7106
IC7102
IC7107
FL7106
FL7105
TP7109
IC7104
C7120
IC7103
Q7106
Q7105
Q7104
Q7103
CN7103
CN7104
FL7104
R7112
R7114
R7113
R7123
R7126
R7136
C7128
C7122
SONY
C1
A-1331-656-A
1-665-046-12

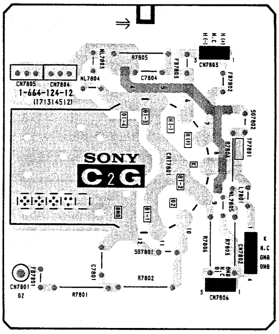
C1 -A SIDE-
1-665-046-12

CN7105
CN7104
R7114
R7113


G1 G2 G4
PICTURE TUBE 07MAC (B)
HV.BLOCK
CN7904 1P
GND
CN7905 1P
GND
TP7903
CN7903 3P WHT :S-MICRO
FB7903 0.45UH
H (-)
N.C
H (+)
FB7902 0.45UH
C7904 330p 2kV
R7905 2.2M 1/2W :RC
TP7902
TO E BOARD CN4004
TP7901
NL7903
R7906 1k 1/2W :RC
CN7906 3P WHT :S-MICRO
G1
N.C
GND
NL7904
R7904 1k 1/2W :RC
TO E2 BOARD CN9007
B-SS1582A<U/C>-C2B

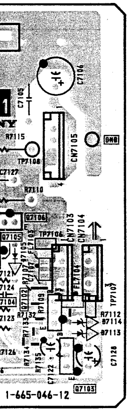

CN7705 CN7704
1-664-123-12
(171314512)
SONY C2R
R7705
CN7703
NL7704
C7704
FB7702
SG7702
TP7701
CN7702
SG7701
R7702
R7701
CN7701
CN7706
R7706
R7703
C7701
G2
K
N.C
GND

C2R -B SIDE-
1-664-123-12

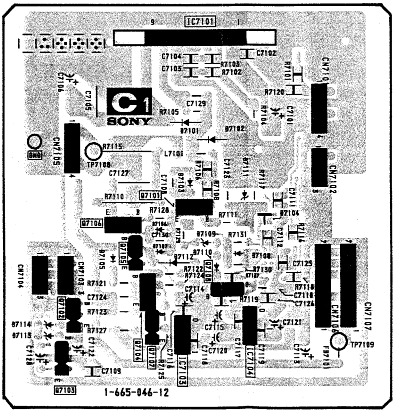

CN7805 CN7804
1-664-124-12
(171314512)
SONY C2G
R7805
CN7803
NL7804
C7804
FB7802
SG7802
TP7801
CN7802
SG7801
R7802
R7801
CN7801
CN7806
R7806
R7803
C7801
G2
K
N.C
GND

C2G -B SIDE-
1-664-124-12

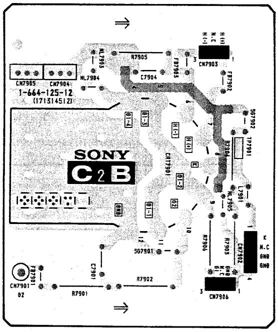
NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.


C7106
C7105
R7115
CN7105
GND
TP7108
C7127
R7110
Q7106
CN7103
CN7104
Q7105
TP7104
R7112
R7114
R7113
C7128
TP7103
1-665-046-12
Q7103

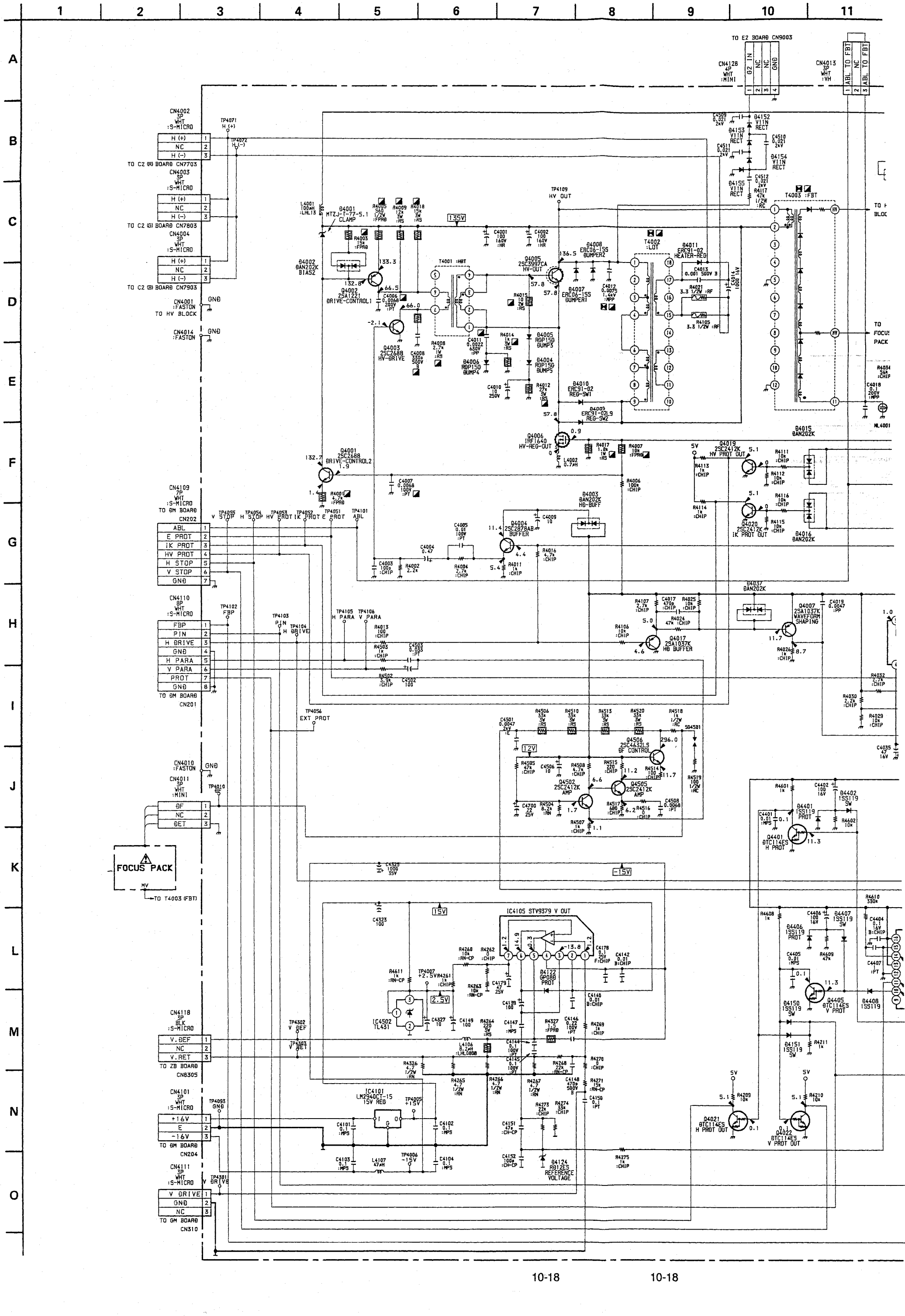
C1 -A SIDE-
1-665-046-12

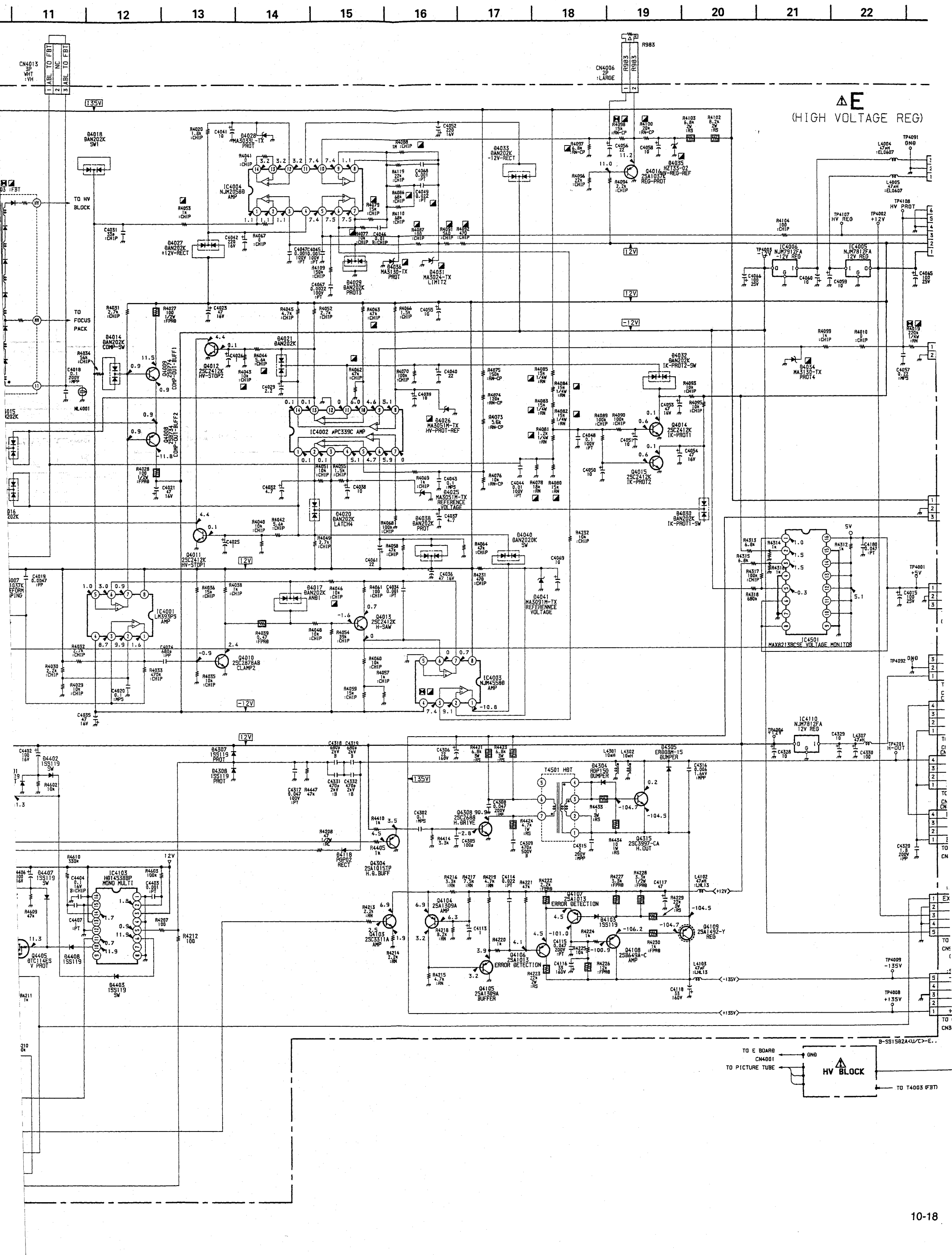

IC7101
C7104
C7103
R7103
R7102
C7102
R7101
CN7101
C7106
C7105
C1 SONY
R7105
C7129
R7120
C7101
R7104
CN7105
GND
R7115
TP7108
L7101
Q7101
Q7102
C7127
R7110
R7128
R7111
CN7102
Q7106
R7109
R7131
Q7108
C7125
CN7104
CN7103
R7121
R7122
R7124
R7118
C7124
R7123
R7127
R7114
R7113
C7128
C7114
C7115
C7121
C7116
CN7106
CN7107
TP7109
FB7101
C7122
C7109
Q7103
Q7104
Q7107
IC7103
IC7104
C7117
C7119
C7113
1-665-046-12

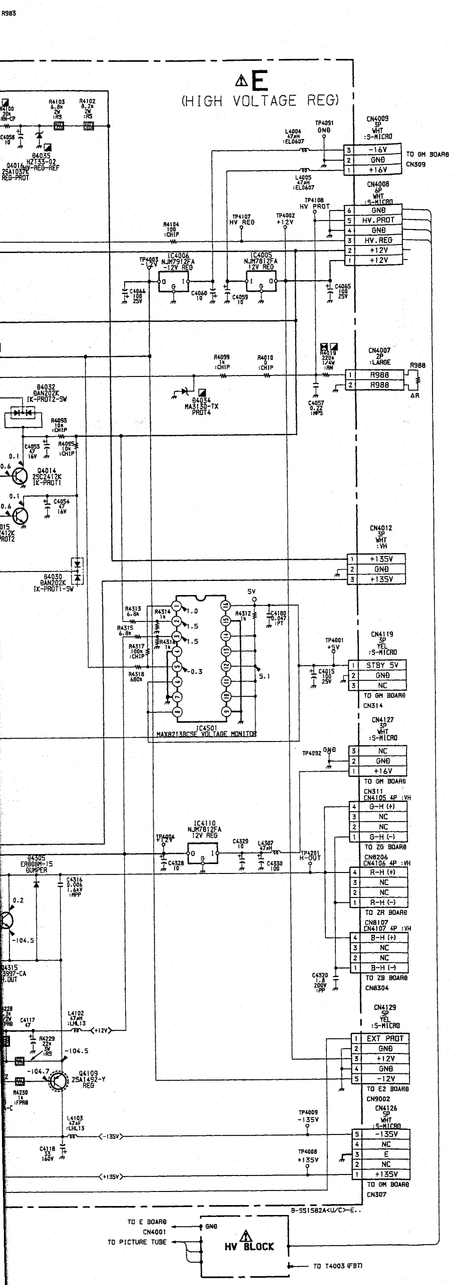
C1 -B SIDE-
1-665-046-12

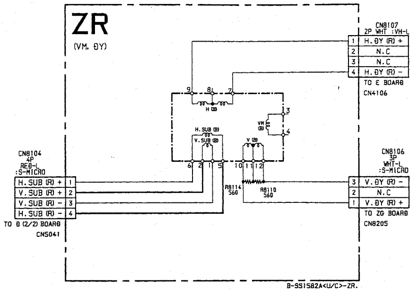

CN7905 CN7904
1-664-125-12
(171314512)
SONY C2B
R7905
CN7903
NL7904
C7904
FB7902
SG7902
TP7901
CN7902
SG7901
R7902
R7901
CN7901
CN7906
R7906
R7903
C7901
G2
K
N.C
GND

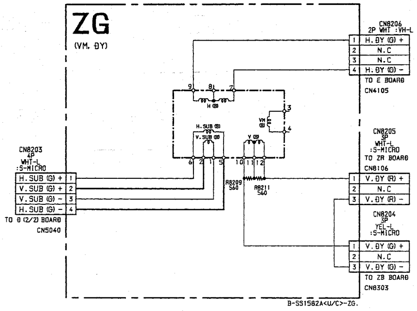
C2B -B SIDE-
1-664-125-12

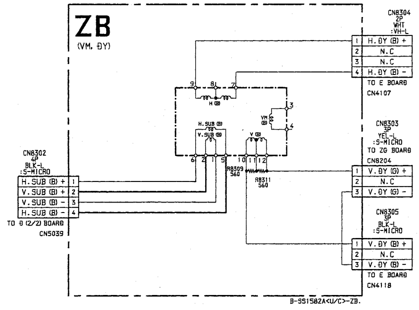

TO E2 BOARD CN9003
CN4128 4P WHT :MINI
G2 IN
NC
NC
GND
CN4013 3P WHT :VH
ABL TO FBT
NC
ABL TO FBT
CN4002 3P WHT :S-MICRO
H (+)
NC
H (-)
TO C2 (R) BOARD CN7703
CN4003 3P WHT :S-MICRO
TO C2 (G) BOARD CN7803
CN4004 3P WHT :S-MICRO
TO C2 (B) BOARD CN7903
CN4001 :FASTON
TO HV BLOCK
CN4014 :FASTON
GND
TP4071 H (+)
TP4072 H (-)
L4001 100μH :LHL13
D4001 MTZJ-T-77-5.1 CLAMP
D4002 DAN202K BIAS2
Q4002 2SA1221 DRIVE-CONTROL1
Q4003 2SC2688 HV-DRIVE
135V
T4001 :HDT
TP4109 HV OUT
Q4005 2SC3997CA HV-OUT
D4008 ERC06-15S DUMPER2
D4007 ERC06-15S DUMPER1
D4005 RGP15G DUMP3
D4004 RGP15G DUMP5
D4006 RGP15G DUMP4
D4010 ERC91-02 REG-SW1
D4003 ERC91-02L9 REG-SW2
T4002 :LOT
D4011 ERC91-02 HEATER-REG
T4003 :FBT
D4152 V11N RECT
D4153 V11N RECT
D4154 V11N RECT
D4155 V11N RECT
TO FOCUS PACK
Q4006 IRF1640 HV-REG-OUT
L4002 0.7μH
Q4001 2SC2688 DRIVE-CONTROL2
D4015 DAN202K
Q4019 2SC2412K HV PROT OUT
Q4020 2SC2412K IK PROT OUT
D4016 DAN202K
CN4109 7P WHT :S-MICRO
TO DM BOARD CN202
ABL
E PROT
IK PROT
HV PROT
H STOP
V STOP
GND
TP4055 V STOP
TP4054 H STOP
TP4053 HV PROT
TP4052 IK PROT
TP4051 E PROT
TP4101 ABL
D4003 DAN202K HD-BUFF
Q4004 2SC2878AB BUFFER
D4037 DAN202K
Q4007 2SA1037K WAVEFORM SHAPING
Q4017 2SA1037K HD BUFFER
CN4110 8P WHT :S-MICRO
FBP
PIN
H DRIVE
GND
H PARA
V PARA
PROT
GND
TO DM BOARD CN201
TP4102 FBP
TP4103 PIN
TP4104 H DRIVE
TP4105 H PARA
TP4106 V PARA
TP4056 EXT PROT
12V
Q4506 2SC4632LS DF CONTROL
Q4502 2SC2412K AMP
Q4505 2SC2412K AMP
CN4010 :FASTON
CN4011 3P WHT :MINI
DF
NC
DET
TP4010 DF
FOCUS PACK
TO T4003 (FBT)
-15V
15V
IC4105 STV9379 V OUT
D4122 GP08B PROT
TP4007 +2.5V
2.5V
IC4502 TL431
D4401 1SS119 PROT
Q4401 DTC114ES H PROT
D4402 1SS119
D4406 1SS119 PROT
D4407 1SS119 SW
Q4405 DTC114ES V PROT
D4150 1SS119 SW
D4151 1SS119 SW
D4408 1SS119
CN4118 3P BLK :S-MICRO
V.DEF
NC
V.RET
TO ZB BOARD CN8305
TP4302 V DEF
TP4303 V RET
L4106 8.2μH :LHL08B
CN4101 3P WHT :S-MICRO
+16V
E
-16V
TO DM BOARD CN204
TP4093 GND
IC4101 LM2940CT-15 15V REG
TP4005 +15V
TP4006 -15V
L4107 47μH
D4124 RD12ES REFERENCE VOLTAGE
Q4021 DTC114ES H PROT OUT
Q4022 DTC114ES V PROT OUT
CN4111 3P WHT :S-MICRO
V DRIVE
GND
NC
TO DM BOARD CN310
TP4301 V DRIVE
5V


11
12
13
14
15
16
17
18
19
20
21
22
⚠E
(HIGH VOLTAGE REG)
CN4013 3P WHT :VH
ABL TO FBT
NC
CN4006 2P :LARGE
R983
135V
12V
-12V
TO HV BLOCK
TO FOCUS PACK
D4018 DAN202K SW1
D4027 DAN202K +12V-RECT
D4028 MA3033L-TX PROT
IC4004 NJM2058D AMP
D4033 DAN202K -12V-RECT
Q4016 2SA1037K REG-PROT
D4035 HZT33-02 HV-REG-REF
D4036 MA3130-TX PROT
D4031 MA3024-TX LIMIT2
D4029 DAN202K PROT3
IC4006 NJM7912FA -12V REG
IC4005 NJM7812FA 12V REG
TP4091 GND
TP4107 HV REG
TP4108 HV PROT
TP4002 +12V
TP4003 -12V
D4014 DAN202K COMP-SW
Q4009 2SD774 COMP-OUT-BUFF1
Q4008 2SD774 COMP-OUT-BUFF2
Q4012 2SC2412K HV-STOP2
D4021 DAN202K
IC4002 μPC339C AMP
D4026 MA3051M-TX HV-PROT-REF
D4032 DAN202K IK-PROT2-SW
Q4014 2SC2412K IK-PROT1
Q4015 2SC2412K IK-PROT2
D4034 MA3130-TX PROT4
D4025 MA3051M-TX REFERENCE VOLTAGE
D4020 DAN202K LATCH4
D4038 DAN202K PROT
D4030 DAN202K IK-PROT1-SW
Q4011 2SC2412K HV-STOP1
D4040 DAN202OK SW
D4041 MA3091M-TX REFERENNCE VOLTAGE
IC4001 LM393PS AMP
D4017 DAN202K AND1
Q4013 2SC2412K H-SAW
Q4010 2SC2878AB CLAMP2
IC4003 NJM4558D AMP
IC4501 MAX8213BCSE VOLTAGE MONITOR
TP4001 +5V
TP4092 GND
5V
IC4110 NJM7812FA 12V REG
TP4201 H-OUT
D4307 1SS119 PROT
D4308 1SS119 PROT
D4402 1SS119 SW
D4305 ERB08M-15 DUMPER
T4501 HDT
D4304 RGP15G DUMPER
Q4308 2SC2688 H.DRIVE
Q4315 2SC3997-CA H.OUT
Q4304 2SA1015TP H.D.BUFF
D4118 PGP02 RECT
IC4103 HD14538BP MONO MULTI
D4407 1SS119 SW
D4408 1SS119
D4403 1SS119 SW
Q4405 DTC114ES V PROT
Q4103 2SC3311A AMP
Q4104 2SA1309A AMP
Q4105 2SA1309A BUFFER
Q4106 2SA1013 ERROR DETECTION
Q4107 2SA1013 ERROR DETECTION
D4103 1SS119
Q4108 2SB649A-C AMP
Q4109 2SA1492-Y REG
TP4009 -135V
TP4008 +135V
(+12V)
(-135V)
(+135V)
TO E BOARD CN4001
TO PICTURE TUBE
GND
HV ⚠ BLOCK
TO T4003 (FBT)
B-SS1582A<U/C>-E..

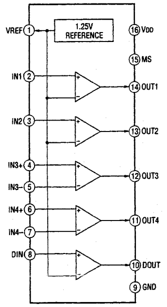

E
(HIGH VOLTAGE REG)
CN4009 3P WHT :S-MICRO
-16V
GND
+16V
TO GM BOARD CN309
CN4008 6P WHT :S-MICRO
GND
HV.PROT
GND
HV.REG
+12V
+12V
IC4006 NJM7912FA -12V REG
IC4005 NJM7812FA 12V REG
TP4107 HV REG
TP4002 +12V
TP4108 HV PROT
CN4007 2P :LARGE
R988
D4034 MA3130-TX PROT4
D4032 DAN202K IK-PROT2-SW
Q4014 2SC2412K IK-PROT1
D4030 DAN202K IK-PROT1-SW
CN4012 3P WHT :VH
+135V
GND
+135V
IC4501 MAX8213BCSE VOLTAGE MONITOR
CN4119 3P YEL :S-MICRO
STBY 5V
GND
NC
TO GM BOARD CN314
CN4127 3P WHT :S-MICRO
NC
GND
+16V
TO GM BOARD CN311
CN4105 4P :VH
G-H (+)
NC
NC
G-H (-)
TO ZG BOARD CN8206
CN4106 4P :VH
R-H (+)
NC
NC
R-H (-)
TO ZR BOARD CN8107
CN4107 4P :VH
B-H (+)
NC
NC
B-H (-)
TO ZB BOARD CN8304
IC4110 NJM7812FA 12V REG
D4305 ERB08M-15 DUMPER
Q4315 H.OUT
Q4109 2SA1492-Y REG
CN4129 5P YEL :S-MICRO
EXT PROT
GND
+12V
GND
-12V
TO E2 BOARD CN9002
CN4126 5P WHT :S-MICRO
-135V
NC
E
NC
+135V
TO GM BOARD CN307
B-SS1582A<U/C>-E..
TO E BOARD CN4001
TO PICTURE TUBE
GND
HV BLOCK
TO T4003 (FBT)


ZR
(VM, DY)
CN8107 2P WHT :VH-L
H.DY (R) +
N.C
N.C
H.DY (R) -
TO E BOARD CN4106
CN8104 4P RED-L :S-MICRO
H.SUB (R) +
V.SUB (R) +
V.SUB (R) -
H.SUB (R) -
TO B (2/2) BOARD CN5041
CN8106 3P WHT-L :S-MICRO
V.DY (R) -
N.C
V.DY (R) +
TO ZG BOARD CN8205
B-SS1582A<U/C>-ZR.


ZG
(VM, DY)
CN8206 2P WHT :VH-L
H.DY (G) +
N.C
N.C
H.DY (G) -
TO E BOARD CN4105
CN8203 4P WHT-L :S-MICRO
H.SUB (G) +
V.SUB (G) +
V.SUB (G) -
H.SUB (G) -
TO B (2/2) BOARD CN5040
CN8205 3P WHT-L :S-MICRO TO ZR BOARD CN8106
V.DY (R) +
N.C
V.DY (R) -
CN8204 3P YEL-L :S-MICRO
V.DY (G) +
N.C
V.DY (G) -
TO ZB BOARD CN8303
B-SS1582A<U/C>-ZG.

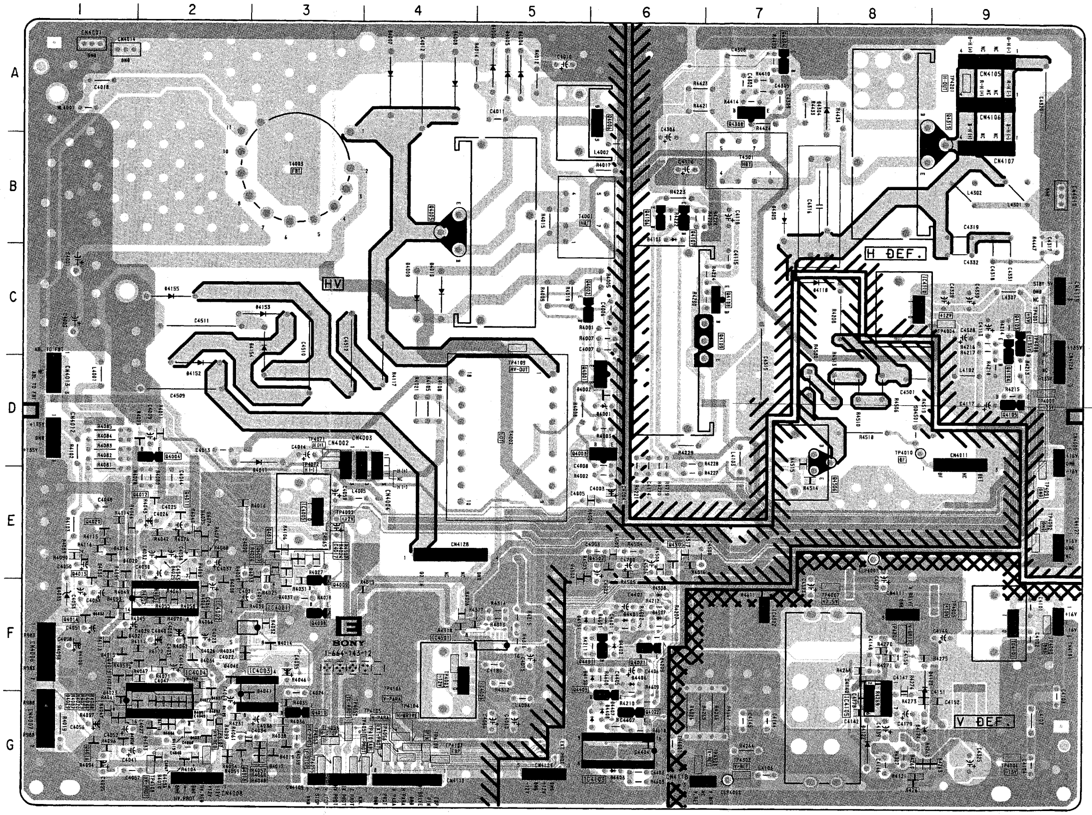

ZB
(VM, DY)
CN8304 2P WHT :VH-L
H.DY (B) +
N.C
N.C
H.DY (B) -
TO E BOARD CN4107
CN8302 4P BLK-L :S-MICRO
H.SUB (B) +
V.SUB (B) +
V.SUB (B) -
H.SUB (B) -
TO B (2/2) BOARD CN5039
CN8303 3P YEL-L :S-MICRO TO ZG BOARD CN8204
V.DY (G) +
N.C
V.DY (G) -
CN8305 3P BLK-L :S-MICRO
V.DY (B) +
N.C
V.DY (B) -
TO E BOARD CN4118
B-SS1582A<U/C>-ZB.

E BOARD IC4051 MAX8213BCSE

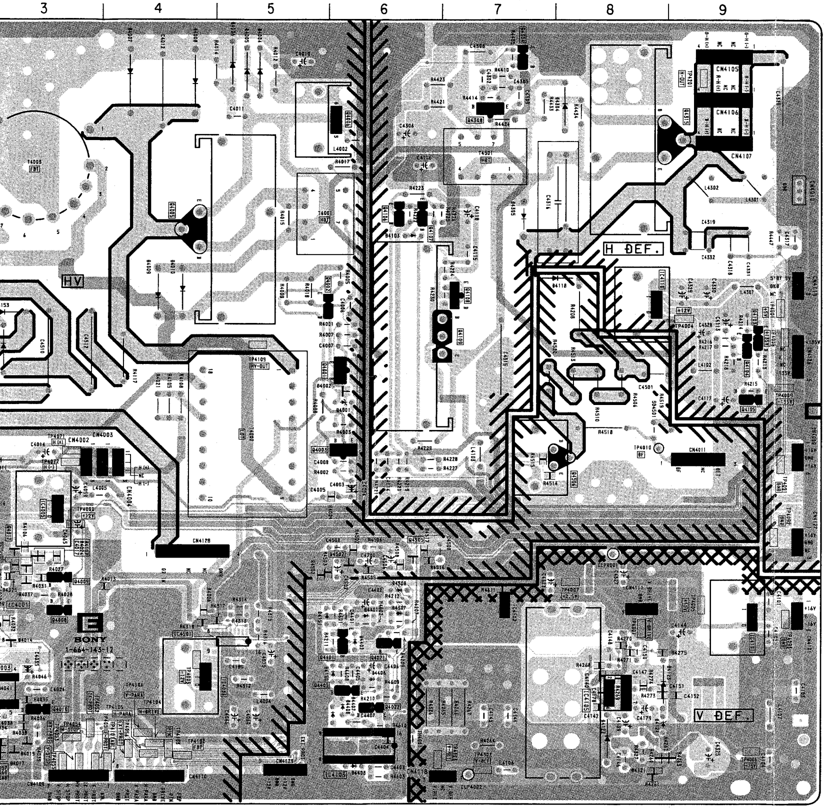

1.25V REFERENCE
VREF 1
IN1 2
IN2 3
IN3+ 4
IN3- 5
IN4+ 6
IN4- 7
DIN 8
16 VDD
15 MS
14 OUT1
13 OUT2
12 OUT3
11 OUT4
10 DOUT
9 GND

E BOARD

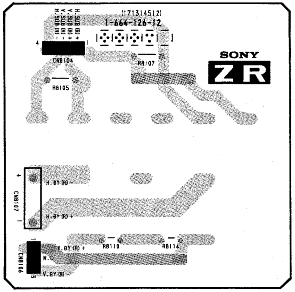
CN4001	A-1
CN4002	D-3
CN4003	D-4
CN4004	D-4
CN4006	F-1
CN4007	G-1
CN4008	G-2
CN4009	D-9
CN4010	B-9
CN4011	D-9
CN4012	D-1
CN4013	D-1
CN4014	A-1
CN4101	F-9
CN4105	A-9
CN4106	A-9
CN4107	B-9
CN4109	G-3
CN4110	G-4
CN4111	F-8
CN4118	G-7
CN4119	C-9
CN4126	C-9
CN4127	E-9
CN4128	E-4
CN4129	G-5
D4001	D-6
D4002	D-6
D4003	D-2
D4004	A-5
D4005	A-5
D4006	A-5
D4007	A-4
D4008	A-4
D4009	C-4
D4010	C-4
D4011	D-3
D4014	F-3
D4015	F-1
D4016	E-1
D4017	G-3
D4018	F-1
D4020	E-1
D4021	F-1
D4025	E-2
D4026	F-2
D4027	F-2
D4028	G-1
D4029	G-2
D4030	E-1
D4031	G-2
D4032	F-1
D4033	G-2
D4034	F-2
D4035	F-1
D4036	G-2
D4037	F-3
D4038	E-2
D4040	F-2
D4041	G-2
D4103	B-6
D4118	C-8
D4122	G-8
D4124	G-8
D4150	F-6
D4151	F-5
D4152	D-2
D4153	C-3
D4154	C-3
D4155	C-2
D4304	A-8
D4305	B-7
D4307	F-6
D4308	F-6
D4401	F-6
D4402	F-6
D4403	G-6
D4406	F-6
D4407	G-6
D4408	G-6
IC4001	F-2
IC4002	F-2
IC4003	G-3
IC4004	G-2
IC4005	E-3
IC4006	F-4
IC4101	F-9
IC4103	G-6
IC4105	F-8
IC4110	C-8
IC4501	F-5
IC4502	F-7
L4001	D-1
L4002	B-6
L4004	G-5
L4005	E-3
L4102	D-9
L4103	D-7
L4106	G-7
L4107	G-9
L4301	B-9
L4302	B-9
L4307	C-9
Q4001	D-6
Q4002	C-5
Q4003	D-6
Q4004	D-2
Q4005	B-4
Q4006	A-6
Q4007	E-3
Q4008	F-3
Q4009	E-3
Q4010	G-3
Q4011	E-2
Q4012	E-2
Q4013	G-2
Q4014	F-1
Q4015	E-1
Q4016	G-1
Q4017	E-3
Q4019	F-2
Q4020	E-1
Q4021	F-6
Q4022	G-6
Q4103	C-9
Q4104	C-9
Q4105	D-9
Q4106	B-6
Q4107	B-6
Q4108	C-7
Q4109	C-7
Q4304	A-7
Q4308	A-7
Q4315	A-9
Q4401	F-6
Q4405	F-6
Q4502	E-6
Q4505	E-6
Q4506	D-8
TP4001	C-9
TP4002	E-3
TP4003	F-4
TP4004	C-9
TP4005	F-9
TP4006	G-9
TP4007	E-8
TP4008	C-9
TP4009	D-9
TP4010	D-8
TP4051	G-3
TP4052	G-3
TP4053	G-3
TP4054	G-3
TP4055	G-3
TP4056	G-4
TP4071	D-3
TP4072	E-3
TP4091	D-9
TP4092	E-9
TP4093	F-1
TP4101	G-4
TP4102	G-4
TP4103	G-4
TP4104	G-4
TP4105	G-4
TP4106	G-4
TP4107	G-2
TP4108	G-2
TP4109	C-5
TP4201	A-9
TP4301	F-8
TP4302	G-7
TP4303	G-7



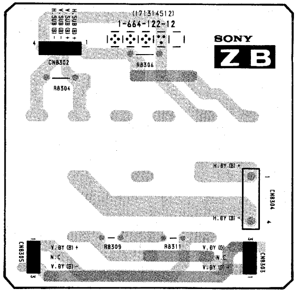
E -B SIDE-
1-664-143-12


3
4
5
6
7
8
9
T4003 FBT
HV
H DEF.
V DEF.
CN4105
CN4106
CN4107
CN4011
CN4128
SONY
E
1-664-143-12

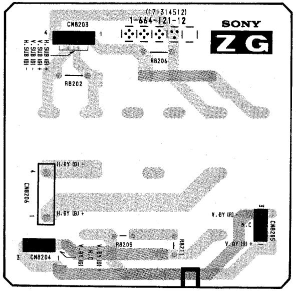
E -B SIDE-
1-664-143-12


(171314512)
1-664-126-12
SONY
ZR
CN8104
R8107
R8105
CN8107
H.BY (R) -
H.BY (R) +
CN8106
V.BY (R) +
R8110
R8114
V.BY (R) -

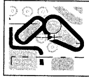
ZR -B SIDE-
1-664-126-12


(171314512)
1-664-122-12
SONY
ZB
CN8302
R8306
R8304
H.BY (B) +
H.BY (B) -
CN8304
CN8305
V.BY (B) +
R8309
R8311
V.BY (B) -
CN8303

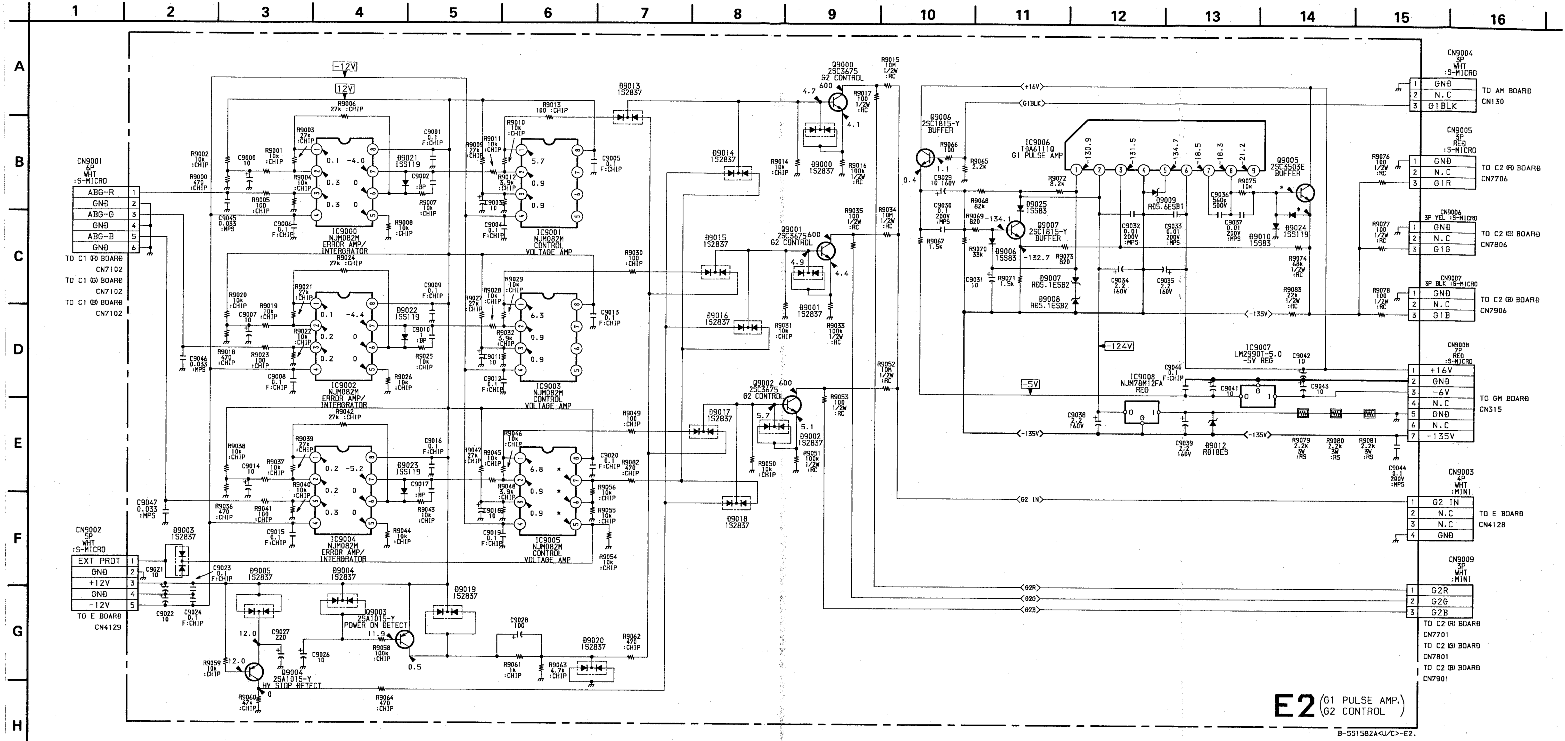
ZB -B SIDE-
1-664-122-12


(171314512)
1-664-121-12
SONY
ZG
CN8203
R8206
R8202
H.BY (G) -
CN8206
H.BY (G) +
V.BY (G) -
CN8205
R8209
R8211
V.BY (G) +
CN8204

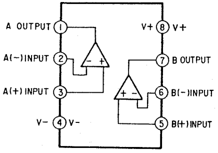
ZG -B SIDE-
1-664-121-12



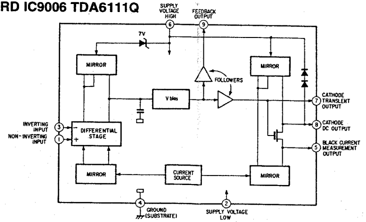
NOTE:
The circuit indicated as left contains high voltage of ove
600 Vp-p. Care must be paid to prevent an electric shock i
inspection or repairing.

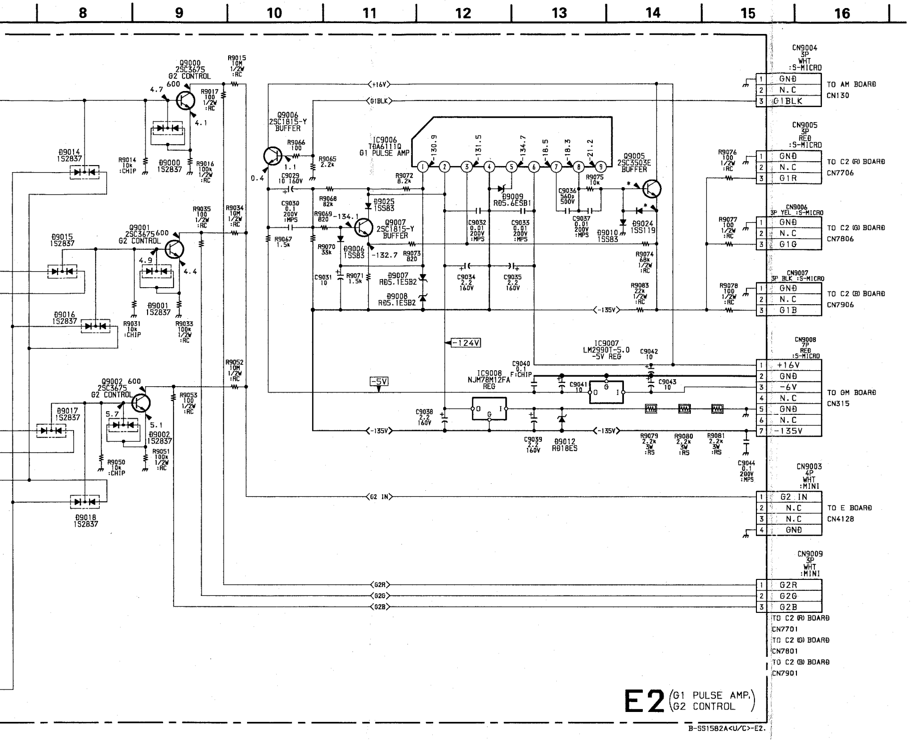

E2 (G1 PULSE AMP, G2 CONTROL)
B-SS1582A<U/C>-E2.
CN9001 6P WHT :S-MICRO
ABG-R
GND
ABG-G
GND
ABG-B
GND
TO C1 (R) BOARD CN7102
TO C1 (G) BOARD CN7102
TO C1 (B) BOARD CN7102
CN9002 5P WHT :S-MICRO
EXT PROT
GND
+12V
GND
-12V
TO E BOARD CN4129
-12V
12V
IC9000 NJM082M ERROR AMP/ INTERGRATOR
IC9001 NJM082M CONTROL VOLTAGE AMP
IC9002 NJM082M ERROR AMP/ INTERGRATOR
IC9003 NJM082M CONTROL VOLTAGE AMP
IC9004 NJM082M ERROR AMP/ INTERGRATOR
IC9005 NJM082M CONTROL VOLTAGE AMP
Q9000 2SC3675 G2 CONTROL
Q9001 2SC3675 G2 CONTROL
Q9002 2SC3675 G2 CONTROL
Q9003 2SA1015-Y POWER ON DETECT
Q9004 2SA1015-Y HV STOP DETECT
Q9006 2SC1815-Y BUFFER
Q9007 2SC1815-Y BUFFER
Q9005 2SC3503E BUFFER
IC9006 TDA6111Q G1 PULSE AMP
IC9007 LM2990T-5.0 -5V REG
IC9008 NJM78M12FA REG
-124V
-5V
CN9004 3P WHT :S-MICRO
GND
N.C
G1BLK
TO AM BOARD CN130
CN9005 3P RED :S-MICRO
GND
N.C
G1R
TO C2 (R) BOARD CN7706
CN9006 3P YEL :S-MICRO
GND
N.C
G1G
TO C2 (G) BOARD CN7806
CN9007 3P BLK :S-MICRO
GND
N.C
G1B
TO C2 (B) BOARD CN7906
CN9008 7P RED :S-MICRO
+16V
GND
-6V
N.C
GND
N.C
-135V
TO GM BOARD CN315
CN9003 4P WHT :MINI
G2 IN
N.C
N.C
GND
TO E BOARD CN4128
CN9009 3P WHT :MINI
G2R
G2G
G2B
TO C2 (R) BOARD CN7701
TO C2 (G) BOARD CN7801
TO C2 (B) BOARD CN7901

E2 BOARD IC9000-IC9005 NJM082M

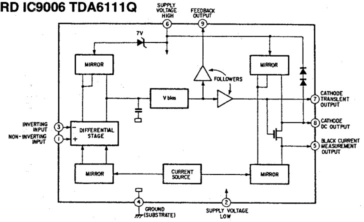

A OUTPUT 1
A(-)INPUT 2
A(+)INPUT 3
V- 4 V-
V+ 8 V+
7 B OUTPUT
6 B(-)INPUT
5 B(+)INPUT

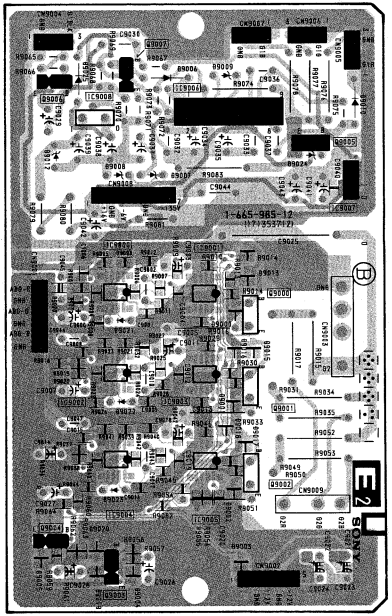
E2 BOARD IC9006 TDA6111Q


SUPPLY VOLTAGE HIGH 6
FEEDBACK OUTPUT 9
7V
MIRROR
MIRROR
V bias
FOLLOWERS
DIFFERENTIAL STAGE
INVERTING INPUT 3
NON-INVERTING INPUT 1
7 CATHODE TRANSIENT OUTPUT
8 CATHODE DC OUTPUT
5 BLACK CURRENT MEASUREMENT OUTPUT
MIRROR
CURRENT SOURCE
MIRROR
4 GROUND (SUBSTRATE)
2 SUPPLY VOLTAGE LOW

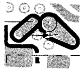

8
9
10
11
12
13
14
15
16
Q9000 2SC3675 G2 CONTROL
Q9001 2SC3675 G2 CONTROL
Q9002 2SC3675 G2 CONTROL
Q9006 2SC1815-Y BUFFER
Q9007 2SC1815-Y BUFFER
Q9005 2SC3503E BUFFER
IC9006 TDA6111Q G1 PULSE AMP
IC9007 LM2990T-5.0 -5V REG
IC9008 NJM78M12FA REG
D9014 1S2837
D9015 1S2837
D9016 1S2837
D9017 1S2837
D9018 1S2837
D9000 1S2837
D9001 1S2837
D9002 1S2837
D9025 1SS83
D9006 1SS83
D9010 1SS83
D9024 1SS119
D9009 RD5.6ESB1
D9007 RD5.1ESB2
D9008 RD5.1ESB2
D9012 RD18ES
<+16V>
<G1BLK>
<-135V>
<G2 IN>
<G2R>
<G2G>
<G2B>
-124V
-5V
CN9004 3P WHT :S-MICRO
1 GND
2 N.C
3 G1BLK
TO AM BOARD CN130
CN9005 3P RED :S-MICRO
1 GND
2 N.C
3 G1R
TO C2 (R) BOARD CN7706
CN9006 3P YEL :S-MICRO
1 GND
2 N.C
3 G1G
TO C2 (G) BOARD CN7806
CN9007 3P BLK :S-MICRO
1 GND
2 N.C
3 G1B
TO C2 (B) BOARD CN7906
CN9008 7P RED :S-MICRO
1 +16V
2 GND
3 -6V
4 N.C
5 GND
6 N.C
7 -135V
TO GM BOARD CN315
CN9003 4P WHT :MINI
1 G2 IN
2 N.C
3 N.C
4 GND
TO E BOARD CN4128
CN9009 3P WHT :MINI
1 G2R
2 G2G
3 G2B
TO C2 (R) BOARD CN7701
TO C2 (G) BOARD CN7801
TO C2 (B) BOARD CN7901
E2 (G1 PULSE AMP, G2 CONTROL)
B-SS1582A<U/C>-E2.

E2 BOARD IC9006 TDA6111Q

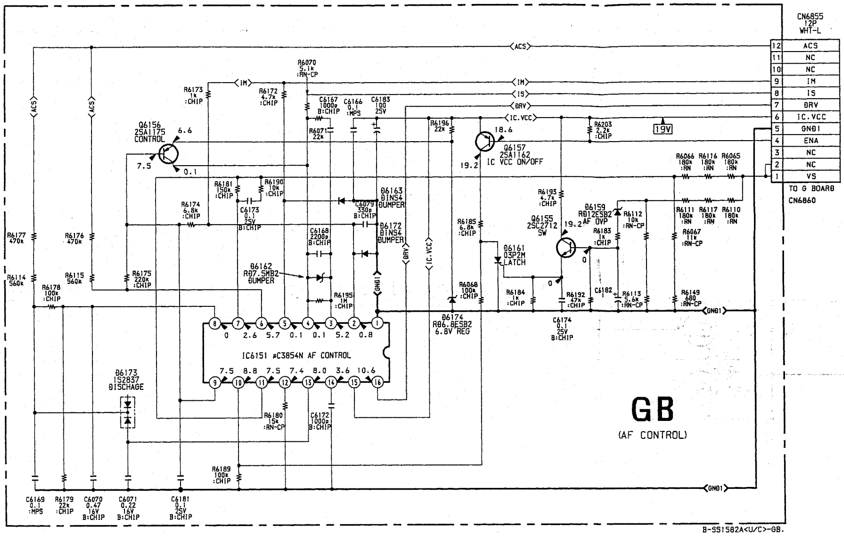

SUPPLY VOLTAGE HIGH
FEEDBACK OUTPUT
7V
MIRROR
MIRROR
FOLLOWERS
V bias
CATHODE TRANSLENT OUTPUT
CATHODE DC OUTPUT
BLACK CURRENT MEASUREMENT OUTPUT
INVERTING INPUT
NON-INVERTING INPUT
DIFFERENTIAL STAGE
MIRROR
CURRENT SOURCE
MIRROR
GROUND (SUBSTRATE)
SUPPLY VOLTAGE LOW

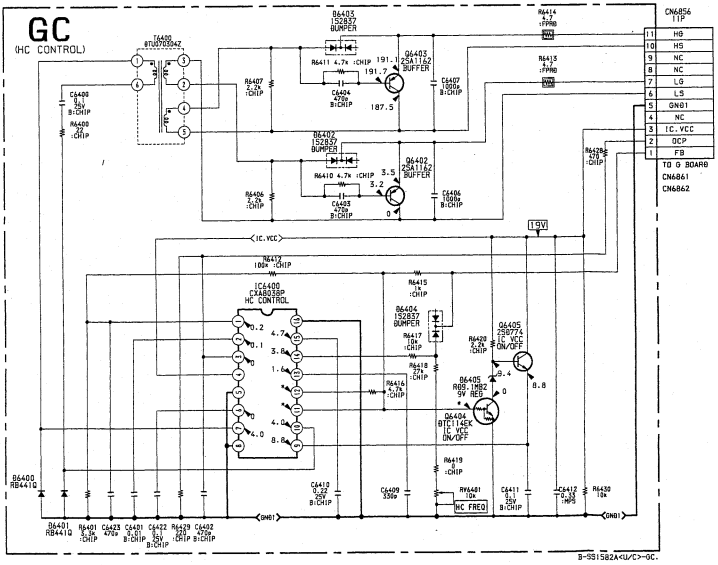

CN9004
CN9007
CN9006
CN9005
CN9008
CN9003
CN9009
CN9002
IC9006
IC9008
IC9007
1-665-985-12
(171353712)
E2
SONY

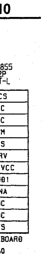
E2 -B SIDE-
1-665-985-12

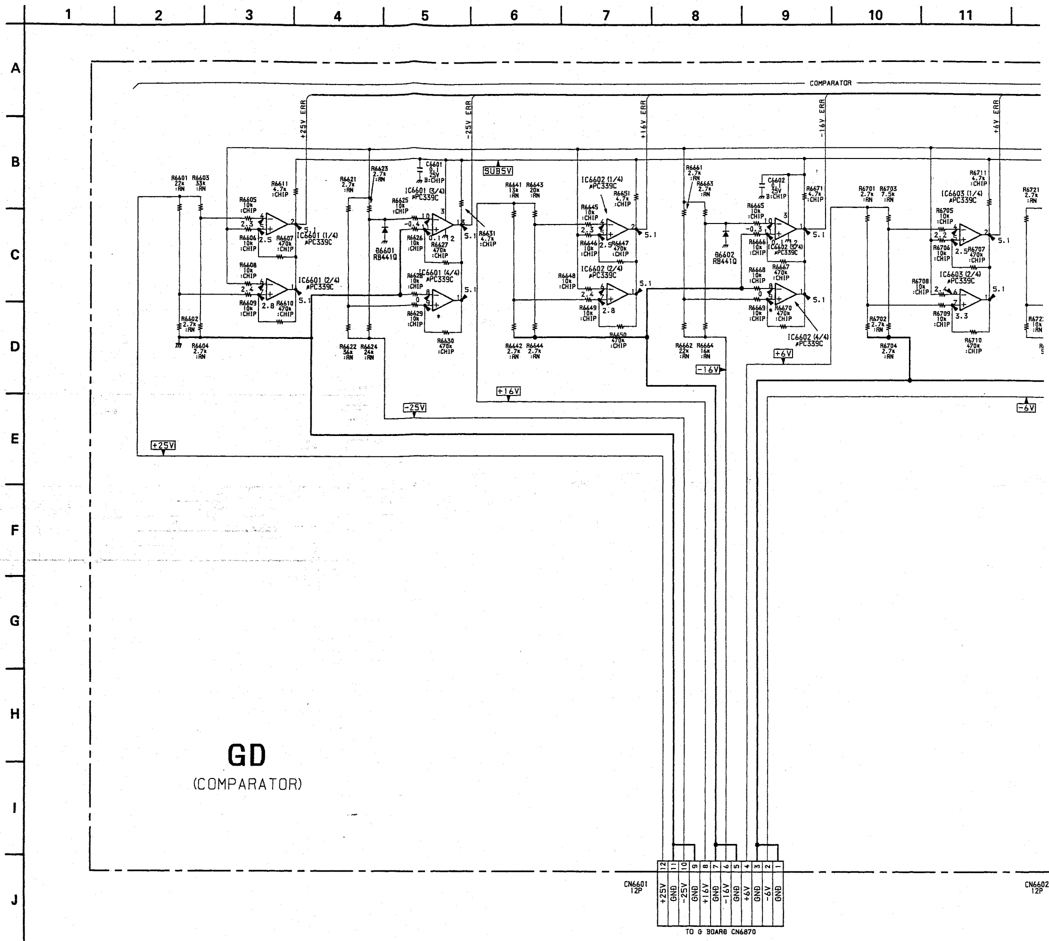


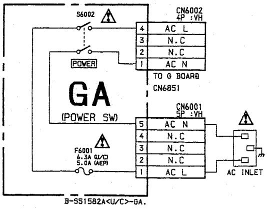
NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

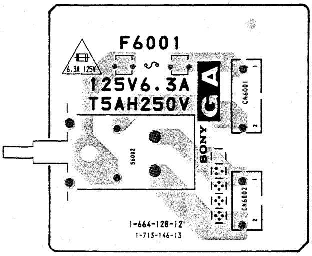

GB
(AF CONTROL)
CN6855 12P WHT-L
ACS
NC
NC
IM
IS
BRV
IC.VCC
GND1
ENA
NC
NC
VS
TO G BOARD CN6860
IC6151 μC3854N AF CONTROL
Q6156 2SA1175 CONTROL
Q6157 2SA1162 IC VCC ON/OFF
Q6155 2SC2712 SW
D6159 RD12ESB2 AF OVP
D6161 03P2M LATCH
D6162 RD7.5MB2 DUMPER
D6163 DINS4 DUMPER
D6172 DINS4 DUMPER
D6173 1S2837 DISCHAGE
D6174 RD6.8ESB2 6.8V REG
19V
B-SS1582A<U/C>-GB.


GC
(HC CONTROL)
T6400 DTU070304Z
CN6856 11P
HD
HS
NC
NC
LG
LS
GND1
NC
IC.VCC
OCP
FB
TO G BOARD CN6861 CN6862
D6403 1S2837 DUMPER
Q6403 2SA1162 BUFFER
D6402 1S2837 DUMPER
Q6402 2SA1162 BUFFER
IC6400 CXA8038P HC CONTROL
D6404 1S2837 DUMPER
Q6405 2SD774 IC VCC ON/OFF
D6405 RD9.1MB2 9V REG
Q6404 DTC114EK IC VCC ON/OFF
RV6401 10k
HC FREQ
D6400 RB441Q
D6401 RB441Q
19V
B-SS1582A<U/C>-GC.

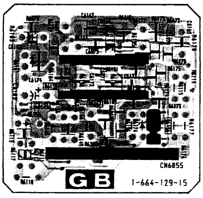

10
855
2P
T-L
CS
C
C
M
S
RV
VCC
B1
NA
C
C
S
BOARD
0


1
2
3
4
5
6
7
8
9
10
11
A
B
C
D
E
F
G
H
I
J
COMPARATOR
+25V ERR
-25V ERR
+16V ERR
-16V ERR
+6V ERR
SUB5V
R6601 22k :RN
R6603 33k :RN
R6602 2.7k :RN
R6604 2.7k :RN
R6605 10k :CHIP
R6606 10k :CHIP
R6607 470k :CHIP
R6608 10k :CHIP
R6609 10k :CHIP
R6610 470k :CHIP
R6611 4.7k :CHIP
IC6601 (1/4) μPC339C
IC6601 (2/4) μPC339C
IC6601 (3/4) μPC339C
IC6601 (4/4) μPC339C
R6621 2.7k :RN
R6622 36k :RN
R6623 2.7k :RN
R6624 24k :RN
R6625 10k :CHIP
R6626 10k :CHIP
R6627 470k :CHIP
R6628 10k :CHIP
R6629 10k :CHIP
R6630 470k :CHIP
R6631 4.7k :CHIP
C6601 0.1 25V B:CHIP
D6601 RB441Q
R6641 13k :RN
R6643 20k :RN
R6642 2.7k :RN
R6644 2.7k :RN
IC6602 (1/4) μPC339C
IC6602 (2/4) μPC339C
IC6602 (3/4) μPC339C
IC6602 (4/4) μPC339C
R6645 10k :CHIP
R6646 10k :CHIP
R6647 470k :CHIP
R6648 10k :CHIP
R6649 10k :CHIP
R6650 470k :CHIP
R6651 4.7k :CHIP
R6661 2.7k :RN
R6663 2.7k :RN
R6662 22k :RN
R6664 16k :RN
R6665 10k :CHIP
R6666 10k :CHIP
R6667 470k :CHIP
R6668 10k :CHIP
R6669 10k :CHIP
R6670 470k :CHIP
R6671 4.7k :CHIP
C6602 0.1 25V B:CHIP
D6602 RB441Q
R6701 2.7k :RN
R6703 7.5k :RN
R6702 2.7k :RN
R6704 2.7k :RN
R6705 10k :CHIP
R6706 10k :CHIP
R6707 470k :CHIP
R6708 10k :CHIP
R6709 10k :CHIP
R6710 470k :CHIP
R6711 4.7k :CHIP
IC6603 (1/4) μPC339C
IC6603 (2/4) μPC339C
R6721 2.7k :RN
2.3
2.5
2.4
2.8
-0.4
0.1
0
2.9
-0.3
2.2
3.3
5.1
+25V
-25V
+16V
-16V
+6V
-6V
GD
(COMPARATOR)
CN6601 12P
12 +25V
11 GND
10 -25V
9 GND
8 +16V
7 GND
6 -16V
5 GND
4 +6V
3 GND
2 -6V
1 GND
TO G BOARD CN6870
CN6602 12P

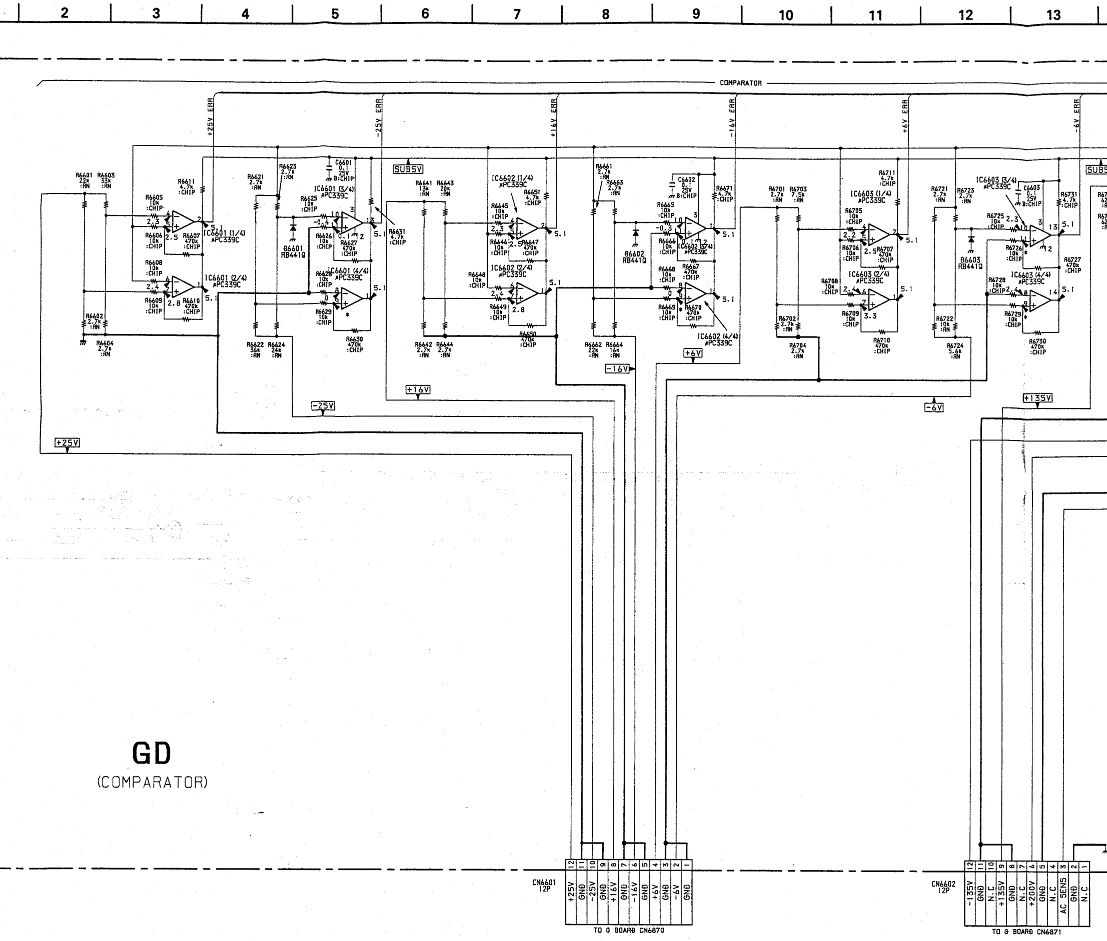

K
L
M
N
O
P
S6002
POWER
GA
(POWER SW)
F6001
6.3A (U/C)
5.0A (AEP)
CN6002 4P :VH
4 AC L
3 N.C
2 N.C
1 AC N
TO G BOARD CN6851
CN6001 5P :VH
5 AC N
4 N.C
3 N.C
2 N.C
1 AC L
AC INLET
B-SS1582A<U/C>-GA.

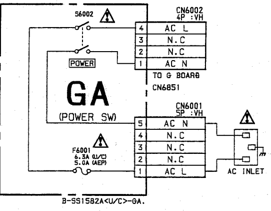

F6001
6.3A 125V
125V6.3A
T5AH250V
GA
SONY
CN6001
CN6002
S6002
1-664-128-12
1-713-146-13

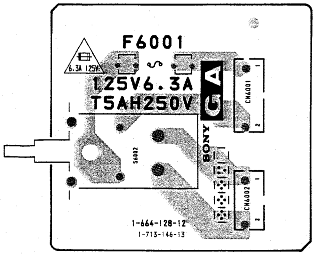
GA -B SIDE-
1-664-128-12


CN6855
GB
1-664-129-15

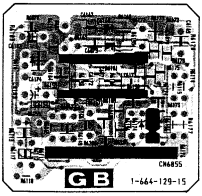
GB -B SIDE-
1-664-129-15


2
3
4
5
6
7
8
9
10
11
12
13
COMPARATOR
+25V ERR
-25V ERR
+16V ERR
-16V ERR
+6V ERR
-6V ERR
SUB5V
IC6601 (1/4) μPC339C
IC6601 (2/4)
IC6601 (3/4) μPC339C
IC6601 (4/4) μPC339C
IC6602 (1/4) μPC339C
IC6602 (2/4) μPC339C
IC6602 (3/4)
IC6602 (4/4) μPC339C
IC6603 (1/4) μPC339C
IC6603 (2/4) μPC339C
IC6603 (3/4) μPC339C
IC6603 (4/4) μPC339C
D6601 RB441Q
D6602 RB441Q
D6603 RB441Q
C6601 0.1 25V B:CHIP
C6602 0.1 25V B:CHIP
C6603 0.1 25V B:CHIP
+25V
-25V
+16V
-16V
+6V
-6V
+135V
GD
(COMPARATOR)
CN6601 12P
+25V
GND
-25V
GND
+16V
GND
-16V
GND
+6V
GND
-6V
GND
TO G BOARD CN6870
CN6602 12P
-135V
GND
N.C
+135V
GND
N.C
+200V
GND
N.C
AC SENS
GND
N.C
TO G BOARD CN6871

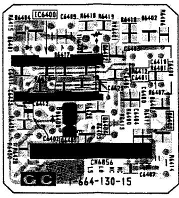

S6002
CN6002 4P :VH
AC L
N.C
N.C
AC N
POWER
TO G BOARD CN6851
GA
(POWER SW)
CN6001 5P :VH
AC N
N.C
N.C
N.C
AC L
F6001 6.3A (U/C) 5.0A (AEP)
AC INLET
B-SS1582A<U/C>-GA.


F6001
6.3A 125V
125V6.3A
T5AH250V
GA
SONY
S6002
CN6001
CN6002
1-664-128-12
1-713-146-13

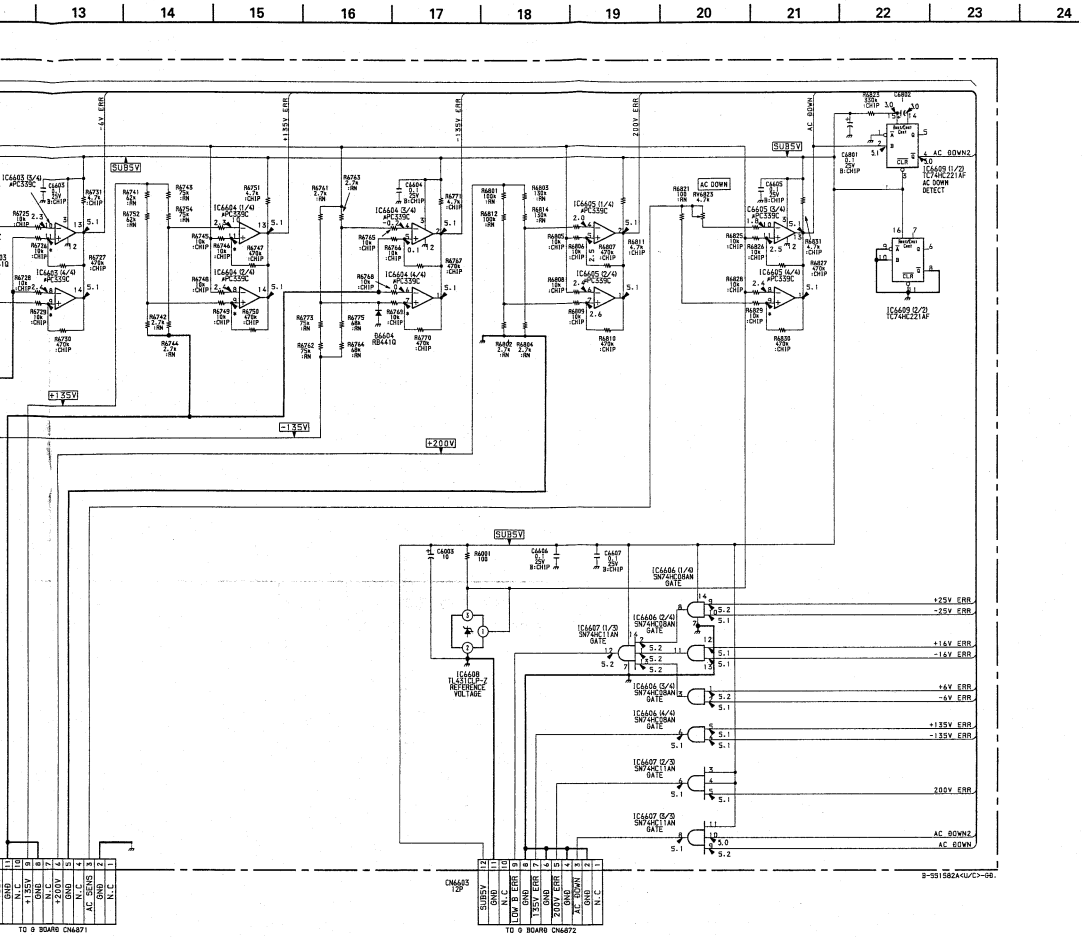
GA -B SIDE-
1-664-128-12

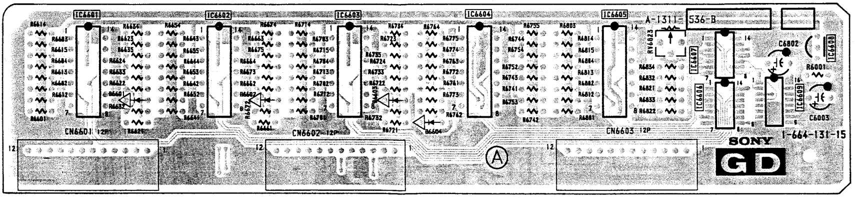

CN6855
GB
1-664-129-15

GB -B SIDE-
1-664-129-15

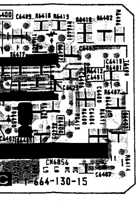

IC6400
CN6856
GC
1-664-130-15

GC -B SIDE-
1-664-130-15

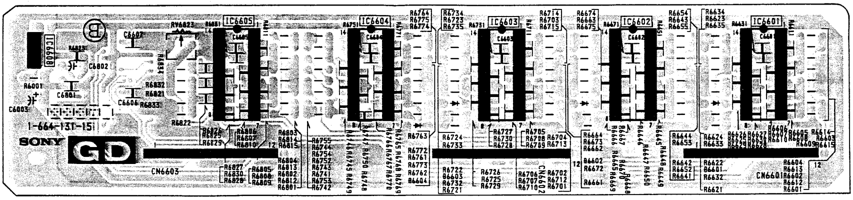

13
14
15
16
17
18
19
20
21
22
23
24
-6V ERR
+135V ERR
-135V ERR
200V ERR
AC DOWN
SUB5V
IC6603 (3/4) μPC339C
IC6603 (4/4) μPC339C
IC6604 (1/4) μPC339C
IC6604 (2/4) μPC339C
IC6604 (3/4) μPC339C
IC6604 (4/4) μPC339C
IC6605 (1/4) μPC339C
IC6605 (2/4) μPC339C
IC6605 (3/4) μPC339C
IC6605 (4/4) μPC339C
IC6609 (1/2) TC74HC221AF AC DOWN DETECT
IC6609 (2/2) TC74HC221AF
AC DOWN2
D6604 RB441Q
+135V
-135V
+200V
IC6606 (1/4) SN74HC08AN GATE
IC6606 (2/4) SN74HC08AN GATE
IC6606 (3/4) SN74HC08AN GATE
IC6606 (4/4) SN74HC08AN GATE
IC6607 (1/3) SN74HC11AN GATE
IC6607 (2/3) SN74HC11AN GATE
IC6607 (3/3) SN74HC11AN GATE
IC6608 TL431CLP-Z REFERENCE VOLTAGE
+25V ERR
-25V ERR
+16V ERR
-16V ERR
+6V ERR
-6V ERR
+135V ERR
-135V ERR
200V ERR
AC DOWN2
AC DOWN
GND
N.C
+135V
GND
N.C
+200V
N.C
AC SENS
GND
N.C
TO G BOARD CN6871
CN6603 12P
SUB5V
GND
N.C
LOW B ERR
GND
135V ERR
GND
200V ERR
GND
AC DOWN
GND
N.C
TO G BOARD CN6872
B-SS1582A<U/C>-GD.


IC6601
IC6602
IC6603
IC6604
IC6605
IC6606
IC6607
IC6608
IC6609
CN6601 12P
CN6602 12P
CN6603 12P
A-1311-536-B
SONY
1-664-131-15
GD
Ⓐ

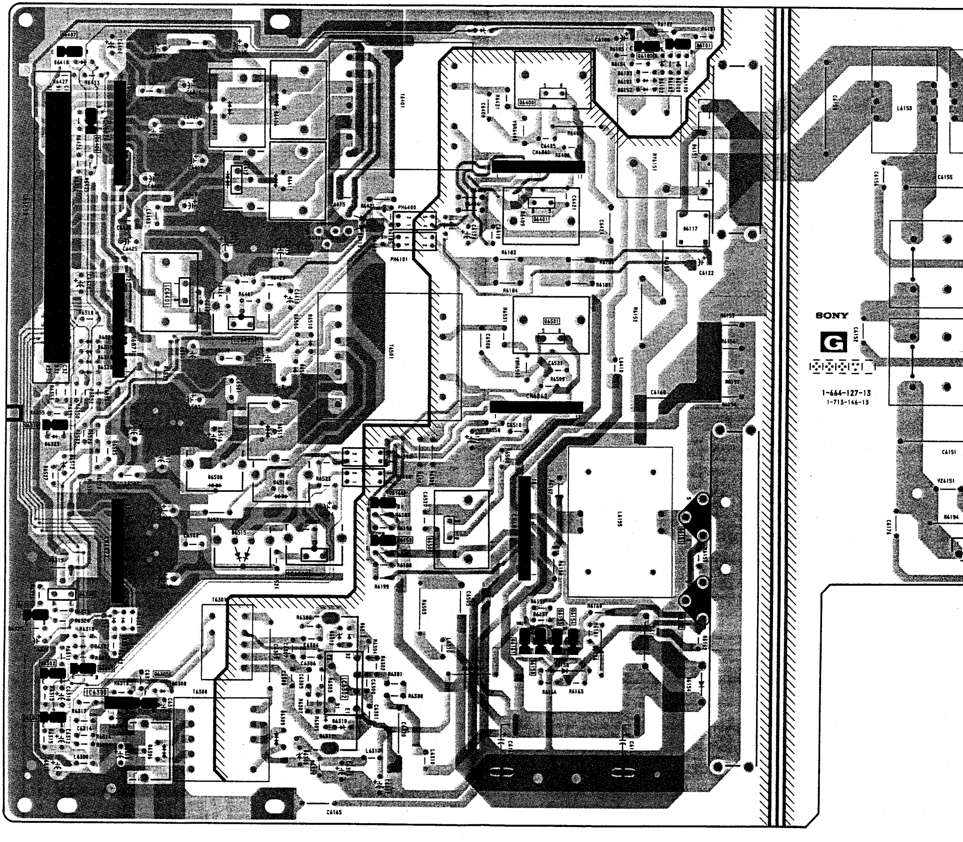
GD -A SIDE-
1-664-131-15

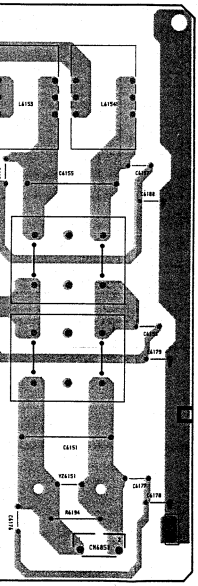

CN6856
1-664-130-15

GC -B SIDE-
1-664-130-15

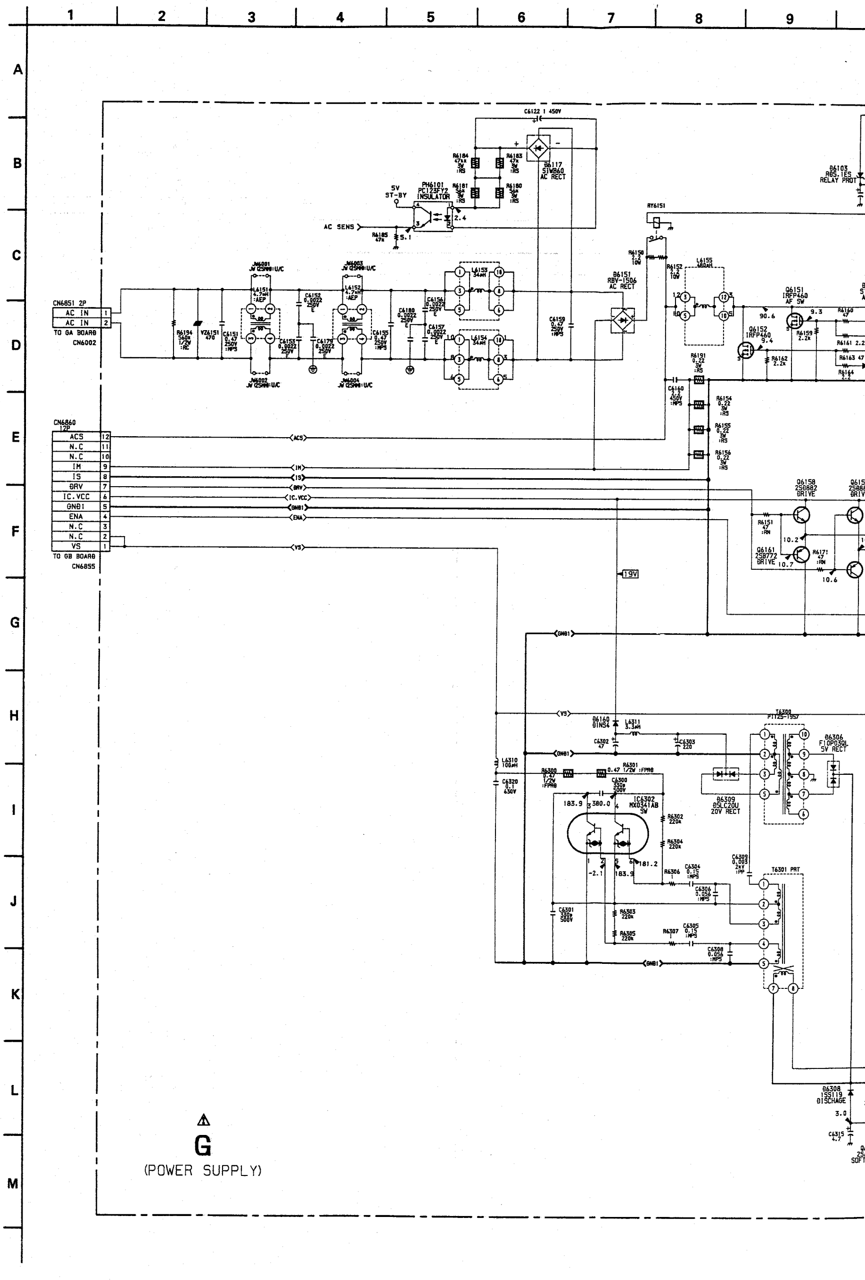

Ⓑ
IC6601
IC6602
IC6603
IC6604
IC6605
IC6608
CN6601
CN6602
CN6603
RV6823
1-664-131-15
SONY
GD

GD -B SIDE-
1-664-131-15


SONY
G
1-664-127-13
1-713-146-13
C6152
L6153
C6155
C6151
VZ6151
R6194
L6155
T6501
T6401
T6301
T6300
PH6400
PH6101
CN6862
CN6863
IC6401
IC6300
IC6302
C6145
C6122
R6117
RY6151
C6140
L6410
L6312
L6313
L6300


L6153
L6154
C6155
C6188
C6179
C6151
VZ6151
C6177
C6178
R6194
C6176
CN6851

G -B SIDE-
1-664-127-13


1
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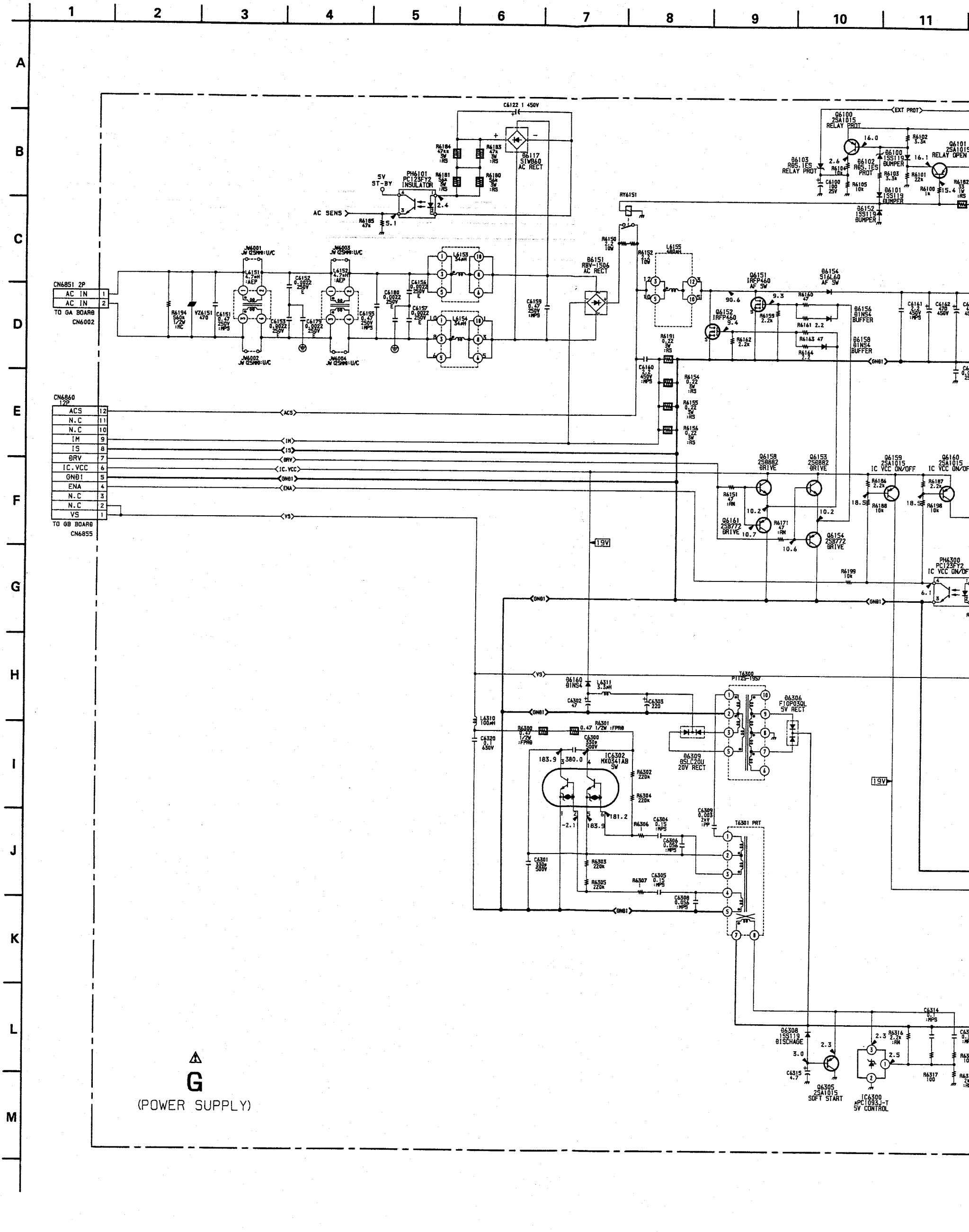
8
9
A
B
C
D
E
F
G
H
I
J
K
L
M
C6122 1 450V
D6117
S1WB60
AC RECT
R6184
47k
3W
:RS
R6183
47k
3W
:RS
R6181
56k
3W
:RS
R6180
56k
3W
:RS
5V
ST-BY
PH6101
PC123FY2
INSULATOR
2.4
AC SENS
R6185
47k
5.1
RY6151
D6103
RGS.1ES
RELAY PROT
CN6851 2P
AC IN
AC IN
TO GA BOARD
CN6002
R6194
560k
1/2W
:RC
VZ6151
470
C6151
0.47
250V
:MPS
JW6001
JW6002
JW6003
JW6004
L6151
4.7mH
:AEP
L6152
4.7mH
:AEP
C6152
0.0022
250V
E
C6153
0.0022
250V
E
C6179
0.0022
250V
E
C6155
0.47
250V
:MPS
C6180
0.0022
250V
E
C6156
0.0022
250V
E
C6157
0.0022
250V
E
L6153
34mH
L6154
34mH
C6159
0.47
250V
:MPS
R6150
2.2
10W
D6151
RBV-1506
AC RECT
R6152
2.2
10W
L6155
480uH
Q6151
IRFP460
AF SW
90.6
9.3
Q6152
IRFP460
9.4
R6159
2.2k
R6162
2.2k
R6160
47
R6161 2.2
R6163 47
R6164
2.2
R6191
0.22
3W
:RS
C6160
2.2
450V
:MPS
R6154
0.22
3W
:RS
R6155
0.22
3W
:RS
R6156
0.22
3W
:RS
CN6860
12P
ACS
N.C
N.C
IM
IS
DRV
IC.VCC
GND1
ENA
N.C
N.C
VS
TO GB BOARD
CN6855
ACS
IM
IS
DRV
IC.VCC
GND1
ENA
VS
Q6158
2SD882
DRIVE
R6151
47
:RN
10.2
Q6161
2SB772
DRIVE
10.7
R6171
47
:RN
10.6
19V
GND1
VS
D6160
D1NS4
L6311
3.3mH
C6302
47
C6303
220
GND1
L6310
100uH
C6320
0.1
630V
R6300
0.47
1/2W
:FPRB
R6301
0.47 1/2W :FPRB
C6300
330p
500V
183.9
380.0
IC6302
MX0341AB
SW
R6302
220k
R6304
220k
-2.1
183.9
181.2
R6306
C6304
0.15
:MPS
C6306
0.056
:MPS
C6301
330p
500V
R6303
220k
R6305
220k
R6307
C6305
0.15
:MPS
C6308
0.056
:MPS
GND1
T6300
PIT25-1957
D6306
F10P03QL
5V RECT
D6309
D5LC20U
20V RECT
C6309
0.003
2kV
:PP
T6301 PRT
D6308
1SS119
DISCHAGE
3.0
C6315
4.7
SOFT

G
(POWER SUPPLY)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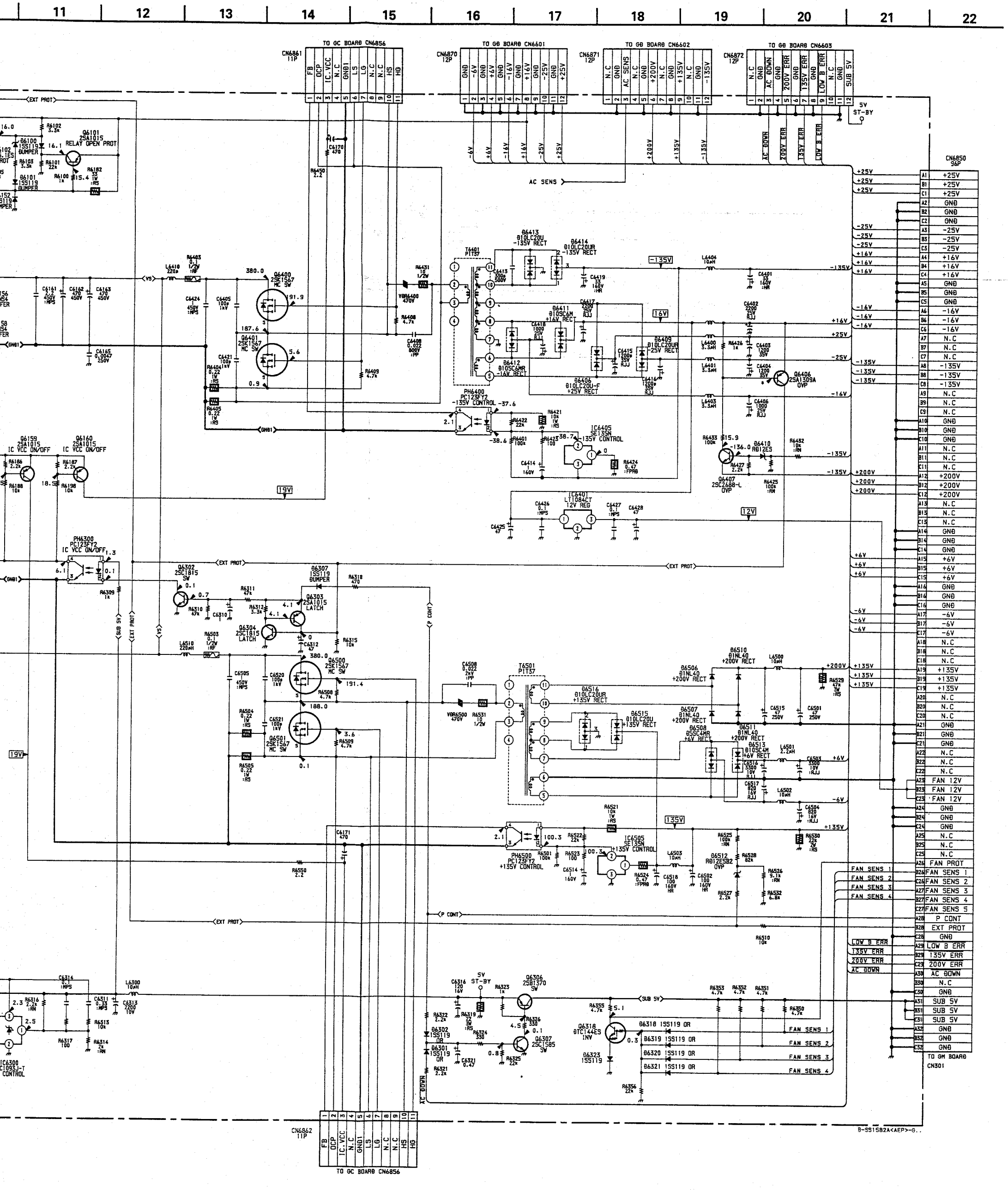
9
10
11
A
B
C
D
E
F
G
H
I
J
K
L
M
CN6851 2P
AC IN
AC IN
TO GA BOARD
CN6002
CN6860 12P
ACS
N.C
N.C
IM
IS
DRV
IC.VCC
GND1
ENA
N.C
N.C
VS
TO GB BOARD
CN6855
5V ST-BY
PH6101 PC123FY2 INSULATOR
AC SENS
D6117 S1WB60 AC RECT
C6122 1 450V
D6151 RBV-1506 AC RECT
RY6151
L6155 480µH
Q6151 IRFP460 AF SW
Q6152 IRFP460
D6154 S1GL60 AF SW
D6156 D1NS4 BUFFER
D6158 D1NS4 BUFFER
Q6100 2SA1015 RELAY PROT
Q6101 2SA1015 RELAY OPEN
D6103 RD5.1ES RELAY PROT
D6102 RD5.1ES PROT
D6100 1SS119 DUMPER
D6101 1SS119 DUMPER
D6152 1SS119 DUMPER
EXT PROT
Q6158 2SB882 DRIVE
Q6153 2SB882 DRIVE
Q6161 2SB772 DRIVE
Q6154 2SB772 DRIVE
Q6159 2SA1015 IC VCC ON/OFF
Q6160 2SA1015 IC VCC ON/OFF
PH6300 PC123FY2 IC VCC ON/OFF
19V
T6300 PIT25-1957
D6306 F10P03QL 5V RECT
D6309 D5LC20U 20V RECT
IC6302 MX0541AB SW
T6301 PRT
D6160 D1NS4
L6311 3.3µH
L6310 100µH
D6308 1SS119 DISCHAGE
Q6305 2SA1015 SOFT START
IC6300 µPC1093J-T 5V CONTROL

⚠

G

(POWER SUPPLY)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12
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14
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17
18
19
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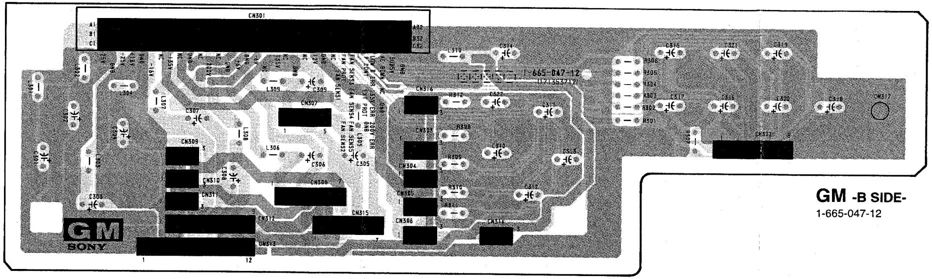
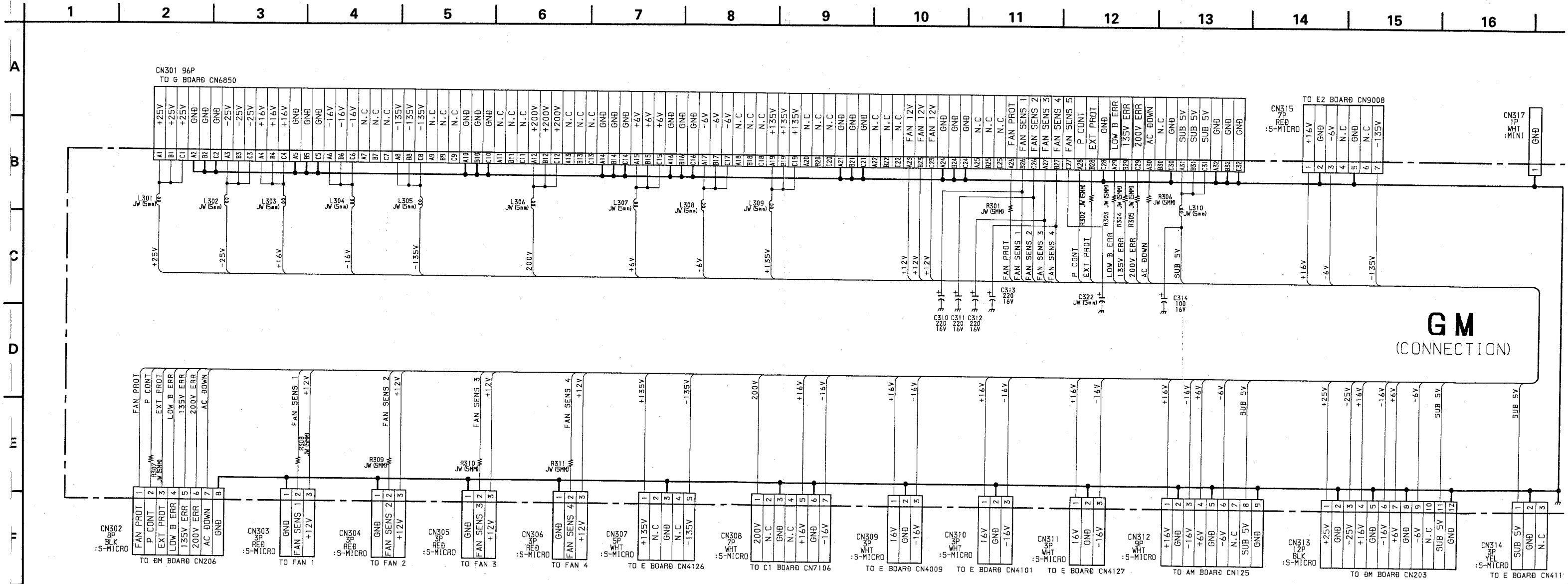
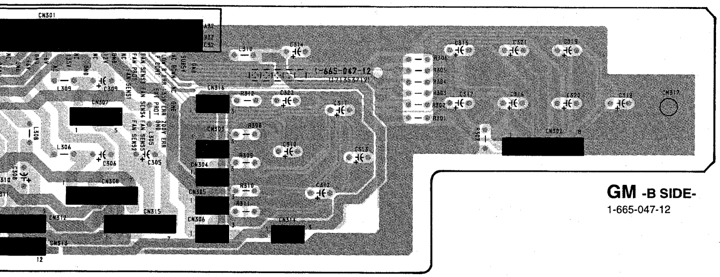
21
22
TO GC BOARD CN6856
CN6861 11P
FB
OCP
IC.VCC
N.C
GND1
LS
LG
N.C
N.C
HS
HG
TO GB BOARD CN6601
CN6870 12P
GND
-6V
GND
+6V
GND
-16V
+16V
GND
-25V
GND
+25V
TO GB BOARD CN6602
CN6871 12P
N.C
GND
AC SENS
N.C
GND
+200V
N.C
GND
+135V
N.C
GND
-135V
TO GB BOARD CN6603
CN6872 12P
N.C
GND
AC DOWN
GND
200V ERR
GND
135V ERR
GND
LOW B ERR
N.C
GND
SUB 5V
5V ST-BY
EXT PROT
AC SENS
Q6101 2SA1015 RELAY OPEN PROT
D6100 1SS119 BUMPER
D6101 1SS119 BUMPER
Q6400 2SK1567 MC SW
Q6401 2SK1567 MC SW
T6401 PIT37
D6413 D10LC20U -135V RECT
D6414 D10LC20UR 2-135V RECT
D6411 D10SC6M +16V RECT
D6412 D10SC6MR -16V RECT
D6409 D10LC20UR -25V RECT
D6406 D10LC20U-F +25V RECT
Q6406 2SA1309A OVP
PH6400 PC123FY2 -135V CONTROL
IC6405 SE135N -135V CONTROL
D6410 RD12ES
Q6407 2SC2688-L OVP
IC6401 LT1084CT 12V REG
Q6159 2SA1015 IC VCC ON/OFF
Q6160 2SA1015 IC VCC ON/OFF
PH6300 PC123FY2 IC VCC ON/OFF
Q6302 2SC1815 SW
D6307 1SS119 BUMPER
Q6303 2SA1015 LATCH
Q6304 2SC1815 LATCH
Q6500 2SK1567 MC SW
Q6501 2SK1567 MC SW
T6501 PIT37
D6516 D10LC20UR +135V RECT
D6515 D10LC20U +135V RECT
D6510 D1NL40 +200V RECT
D6506 D1NL40 +200V RECT
D6507 D1NL40 +200V RECT
D6511 D1NL40 +200V RECT
D6508 D5SC4MR +6V RECT
D6513 D10SC4M +6V RECT
PH6500 PC123FY2 +135V CONTROL
IC6505 SE135N +135V CONTROL
D6512 RD12ESB2 OVP
Q6306 2SB1370 SW
Q6307 2SC1585 SW
Q6318 DTC144ES INV
D6318 1SS119 OR
D6319 1SS119 OR
D6320 1SS119 OR
D6321 1SS119 OR
D6323 1SS119
D6302 1SS119 OR
D6301 1SS119 OR
IC6300 ...C1093J-T CONTROL
P CONT
SUB 5V
VS
GND1
19V
16V
12V
-135V
135V
FAN SENS 1
FAN SENS 2
FAN SENS 3
FAN SENS 4
LOW B ERR
135V ERR
200V ERR
AC DOWN
CN6850 96P
A1 +25V
B1 +25V
C1 +25V
A2 GND
B2 GND
C2 GND
A3 -25V
B3 -25V
C3 -25V
A4 +16V
B4 +16V
C4 +16V
A5 GND
B5 GND
C5 GND
A6 -16V
B6 -16V
C6 -16V
A7 N.C
B7 N.C
C7 N.C
A8 -135V
B8 -135V
C8 -135V
A9 N.C
B9 N.C
C9 N.C
A10 GND
B10 GND
C10 GND
A11 N.C
B11 N.C
C11 N.C
A12 +200V
B12 +200V
C12 +200V
A13 N.C
B13 N.C
C13 N.C
A14 GND
B14 GND
C14 GND
A15 +6V
B15 +6V
C15 +6V
A16 GND
B16 GND
C16 GND
A17 -6V
B17 -6V
C17 -6V
A18 N.C
B18 N.C
C18 N.C
A19 +135V
B19 +135V
C19 +135V
A20 N.C
B20 N.C
C20 N.C
A21 GND
B21 GND
C21 GND
A22 N.C
B22 N.C
C22 N.C
A23 FAN 12V
B23 FAN 12V
C23 FAN 12V
A24 GND
B24 GND
C24 GND
A25 N.C
B25 N.C
C25 N.C
A26 FAN PROT
B26 FAN SENS 1
C26 FAN SENS 2
A27 FAN SENS 3
B27 FAN SENS 4
C27 FAN SENS 5
A28 P CONT
B28 EXT PROT
C28 GND
A29 LOW B ERR
B29 135V ERR
C29 200V ERR
A30 AC DOWN
B30 N.C
C30 GND
A31 SUB 5V
B31 SUB 5V
C31 SUB 5V
A32 GND
B32 GND
C32 GND
TO GM BOARD CN301
CN6862 11P
TO GC BOARD CN6856
B-SS1582A<AEP>-G..


CN301
A1
B1
C1
A32
B32
C32
1-665-047-12
CN307
CN308
CN309
CN310
CN311
CN312
CN313
CN314
CN315
CN316
CN317
CN302
CN303
CN304
CN305
CN306
GM
SONY

GM -B SIDE-
1-665-047-12


CN301 96P
TO G BOARD CN6850
TO E2 BOARD CN9008
CN315 7P RED :S-MICRO
CN317 1P WHT :MINI
L301 JW (5mm)
L302 JW (5mm)
L303 JW (5mm)
L304 JW (5mm)
L305 JW (5mm)
L306 JW (5mm)
L307 JW (5mm)
L308 JW (5mm)
L309 JW (5mm)
L310 JW (5mm)
R301 JW (5MM)
R302 JW (5MM)
R303 JW (5MM)
R304 JW (5MM)
R305 JW (5MM)
R306 JW (5MM)
C310 220 16V
C311 220 16V
C312 220 16V
C313 220 16V
C314 100 16V
C322 JW (5mm)
GM
(CONNECTION)
CN302 8P BLK :S-MICRO
TO BM BOARD CN206
CN303 3P RED :S-MICRO
TO FAN 1
CN304 3P RED :S-MICRO
TO FAN 2
CN305 3P RED :S-MICRO
TO FAN 3
CN306 3P RED :S-MICRO
TO FAN 4
CN307 5P WHT :S-MICRO
TO E BOARD CN4126
CN308 7P WHT :S-MICRO
TO C1 BOARD CN7106
CN309 3P WHT :S-MICRO
TO E BOARD CN4009
CN310 3P WHT :S-MICRO
TO E BOARD CN4101
CN311 3P WHT :S-MICRO
TO E BOARD CN4127
CN312 9P WHT :S-MICRO
TO AM BOARD CN125
CN313 12P BLK :S-MICRO
TO BM BOARD CN203
CN314 3P YEL :S-MICRO
TO E BOARD CN411
R307 JW (5MM)
R308 JW (5MM)
R309 JW (5MM)
R310 JW (5MM)
R311 JW (5MM)
FAN PROT
P CONT
EXT PROT
LOW B ERR
135V ERR
200V ERR
AC DOWN
GND
FAN SENS 1
FAN SENS 2
FAN SENS 3
FAN SENS 4
FAN SENS 5
+12V
+25V
-25V
+16V
-16V
+6V
-6V
+135V
-135V
+200V
SUB 5V
N.C
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
A B C D E F

B-SS1582A<L


CN301
CN307
CN308
CN312
CN313
CN315
CN316
CN303
CN304
CN305
CN306
CN314
CN302
CN317
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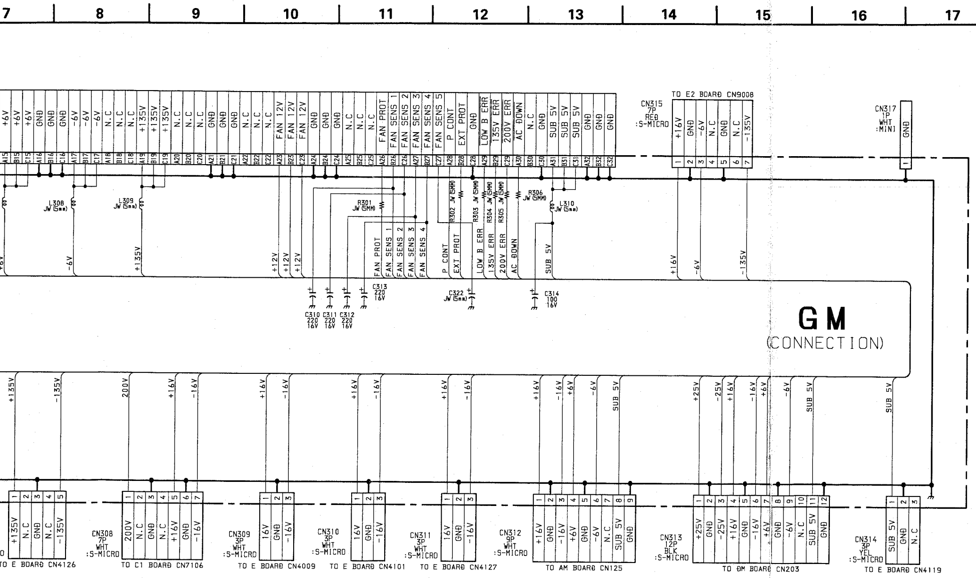
L309
L308
L306
L310
C309
C305
C306
C314
C315
C321
C319
C322
C311
C317
C316
C323
C318
C310
C313
C312
R312
R308
R309
R310
R311
R301
R302
R303
R304
R305
R306
R307

GM -B SIDE-

1-665-047-12


7
8
9
10
11
12
13
14
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16
17
GM
(CONNECTION)
CN315
7P
RED
:S-MICRO
TO E2 BOARD CN9008
CN317
1P
WHT
:MINI
L308
JW (5mm)
L309
JW (5mm)
R301
JW (5MM)
R302 JW (5MM)
R303 JW (5MM)
R304 JW (5MM)
R305 JW (5MM)
R306
JW (5MM)
L310
JW (5mm)
C310 220 16V
C311 220 16V
C312 220 16V
C313 220 16V
C322 JW (5mm)
C314 100 16V
FAN PROT
FAN SENS 1
FAN SENS 2
FAN SENS 3
FAN SENS 4
FAN SENS 5
P CONT
EXT PROT
LOW B ERR
135V ERR
200V ERR
AC DOWN
SUB 5V
CN308
7P
WHT
:S-MICRO
TO E BOARD CN4126
TO C1 BOARD CN7106
CN309
3P
WHT
:S-MICRO
TO E BOARD CN4009
CN310
3P
WHT
:S-MICRO
TO E BOARD CN4101
CN311
3P
WHT
:S-MICRO
TO E BOARD CN4127
CN312
9P
WHT
:S-MICRO
TO AM BOARD CN125
CN313
12P
BLK
:S-MICRO
TO DM BOARD CN203
CN314
3P
YEL
:S-MICRO
TO E BOARD CN4119

B-SS1582A<U/C>-GM.

BA BOARD

*: B SIDE

*CN3401	B-1
*CN3402	E-6
*CN3403	E-6
*CV3001	C-6
*CV3002	C-6
D3001	C-7
D3002	B-7
D3003	B-7
*D3004	A-6
D3005	A-6
D3201	F-7
D3202	F-7
D3203	E-7
*D3204	C-3
D3401	A-1
D3402	A-2
*D3403	A-1
*D3404	A-1
*D3405	A-1
*D3406	A-1
*D3407	G-3
*D3408	G-6
*D3409	A-1
*D3410	A-1
*D3411	F-6
D3412	F-6
D3601	D-7
D3602	E-7
FL3001	C-7
FL3002	B-7
FL3003	B-7
*FL3101	C-6
*FL3102	C-6
*FL3103	B-6
FL3201	G-7
FL3202	F-7
FL3203	E-7
FL3401	D-2
FL3402	D-2
FL3403	D-2
*FL3404	A-2
*FL3405	D-1
*FL3406	A-1
FL3407	C-1
FL3408	C-1
FL3409	D-3
FL3410	D-3
FL3411	D-2
FL3601	D-7
FL3602	E-7
IC3002	C-4
IC3003	B-6
IC3004	A-6
IC3005	A-6
*IC3006	B-6
*IC3007	A-6
*IC3008	A-5
*IC3009	D-6
IC3201	A-3
IC3202	A-3
IC3203	B-3
*IC3204	C-2
*IC3205	B-2
IC3401	E-4
IC3402	E-3
IC3403	E-3
IC3404	E-4
IC3405	E-3
IC3406	E-2
IC3407	F-4
IC3408	F-3
IC3409	F-2
IC3410	E-2
*IC3411	A-2
*IC3412	E-1
*IC3413	A-2
*IC3414	A-2
IC3415	E-5
IC3416	F-5
IC3417	F-6
IC3418	F-4
IC3419	E-4
IC3420	G-3
IC3421	G-3
*IC3422	G-2
IC3423	G-6
IC3424	G-5
*IC3425	G-5
IC3426	E-6
IC3427	E-6
*IC3601	C-4
*IC3602	B-4
IC3603	C-4
IC3604	B-3
IC3605	B-2
IC3606	B-4
IC3607	C-3
IC3608	C-4
L3001	C-5
L3005	C-5
L3008	C-5
L3009	B-5
L3010	A-6
*L3011	A-7
*L3012	A-6
L3013	A-6
L3014	A-5
L3016	B-4
L3017	A-4
L3018	A-4
L3019	D-6
L3020	D-5
L3201	B-4
L3202	G-7
*L3203	B-2
L3204	B-1
L3205	B-1
L3206	C-3
L3437	G-2
L3438	G-2
L3440	G-5
L3441	G-4
L3601	B-3
L3602	B-3
L3603	B-3
Q3001	C-6
Q3002	C-6
*Q3003	C-6
*Q3004	C-6
*Q3005	C-5
*Q3006	C-5
*Q3010	C-5
*Q3011	C-6
Q3012	C-6
*Q3013	C-6
*Q3014	B-5
*Q3015	B-6
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Q3019	A-6
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Q3027	A-4
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*Q3214	C-3
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*Q3216	A-3
*Q3217	A-2
*Q3218	A-2
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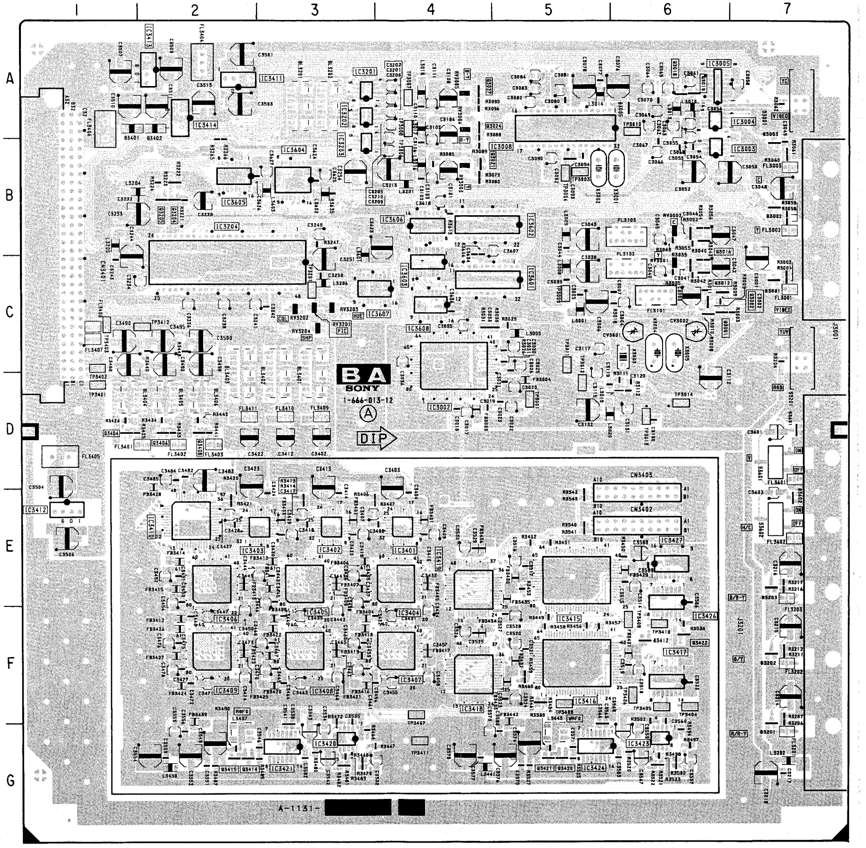
*Q3402	D-3
*Q3403	D-2
Q3404	D-1
*Q3405	D-1
Q3406	D-2
*Q3407	D-2
Q3408	D-2
*Q3409	C-2
*Q3410	G-4
*Q3411	G-3
*Q3412	G-3
*Q3413	G-3
Q3414	G-2
Q3415	G-2
*Q3416	G-6
*Q3417	G-6
*Q3418	G-5
*Q3419	G-5
Q3420	G-5
Q3421	G-5
Q3422	F-6
*Q3423	F-6
RV3001	C-6
RV3002	B-6
RV3003	B-4
RV3004	A-4
RV3005	A-4
RV3201	C-3
RV3202	C-3
RV3203	C-3
RV3204	C-3
*S3001	A-7
*S3201	C-7
S3601	D-7
S3602	E-7
TP3001	D-5
TP3003	B-5
TP3004	B-5
TP3006	B-4
TP3007	A-4
TP3008	A-4
TP3009	C-5
TP3010	A-6
TP3011	C-5
TP3012	D-5
TP3013	D-6
TP3014	D-6
TP3201	C-3
TP3401	D-1
TP3402	C-1
TP3403	C-1
TP3404	F-6
TP3405	F-6
TP3406	F-6
TP3407	F-4
TP3408	F-5
TP3409	F-6
TP3410	F-6
TP3411	G-4
TP3412	C-2
*X3001	B-6
*X3002	B-5
*X3003	C-6
*X3004	C-6
*X3005	C-6



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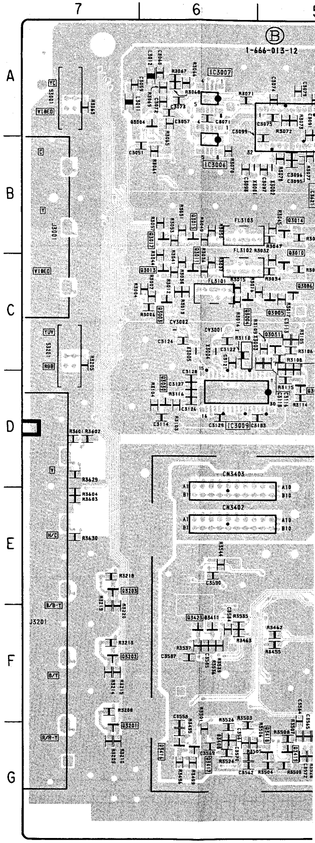
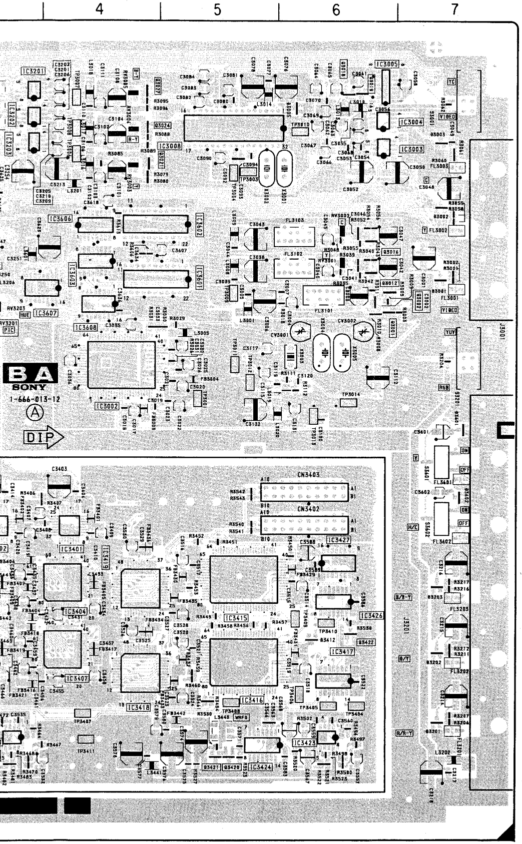
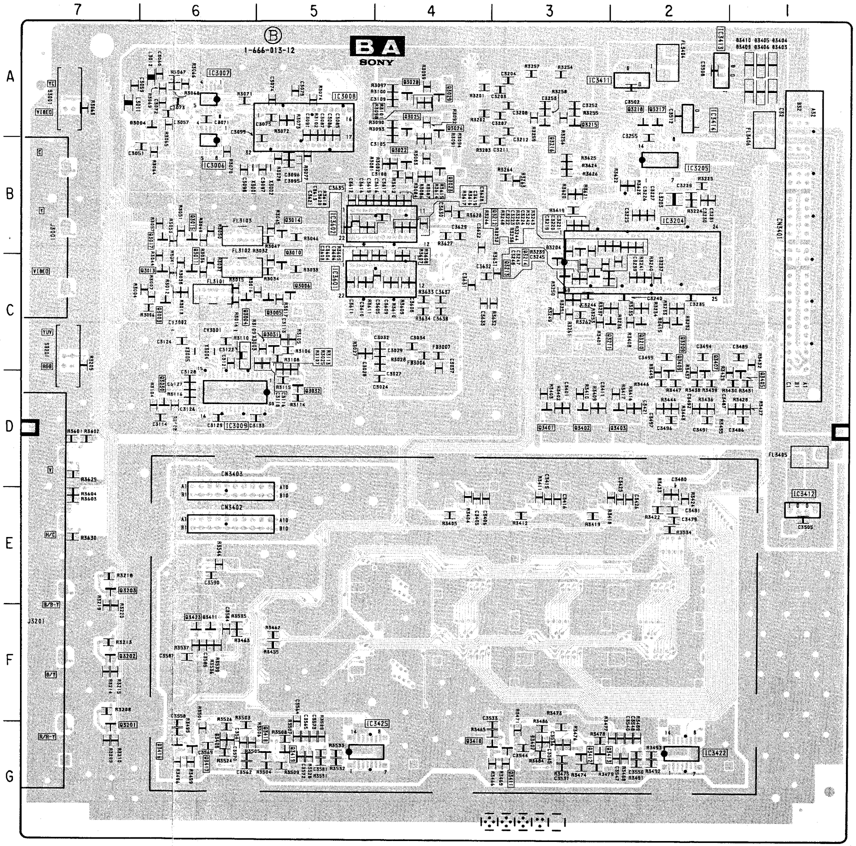
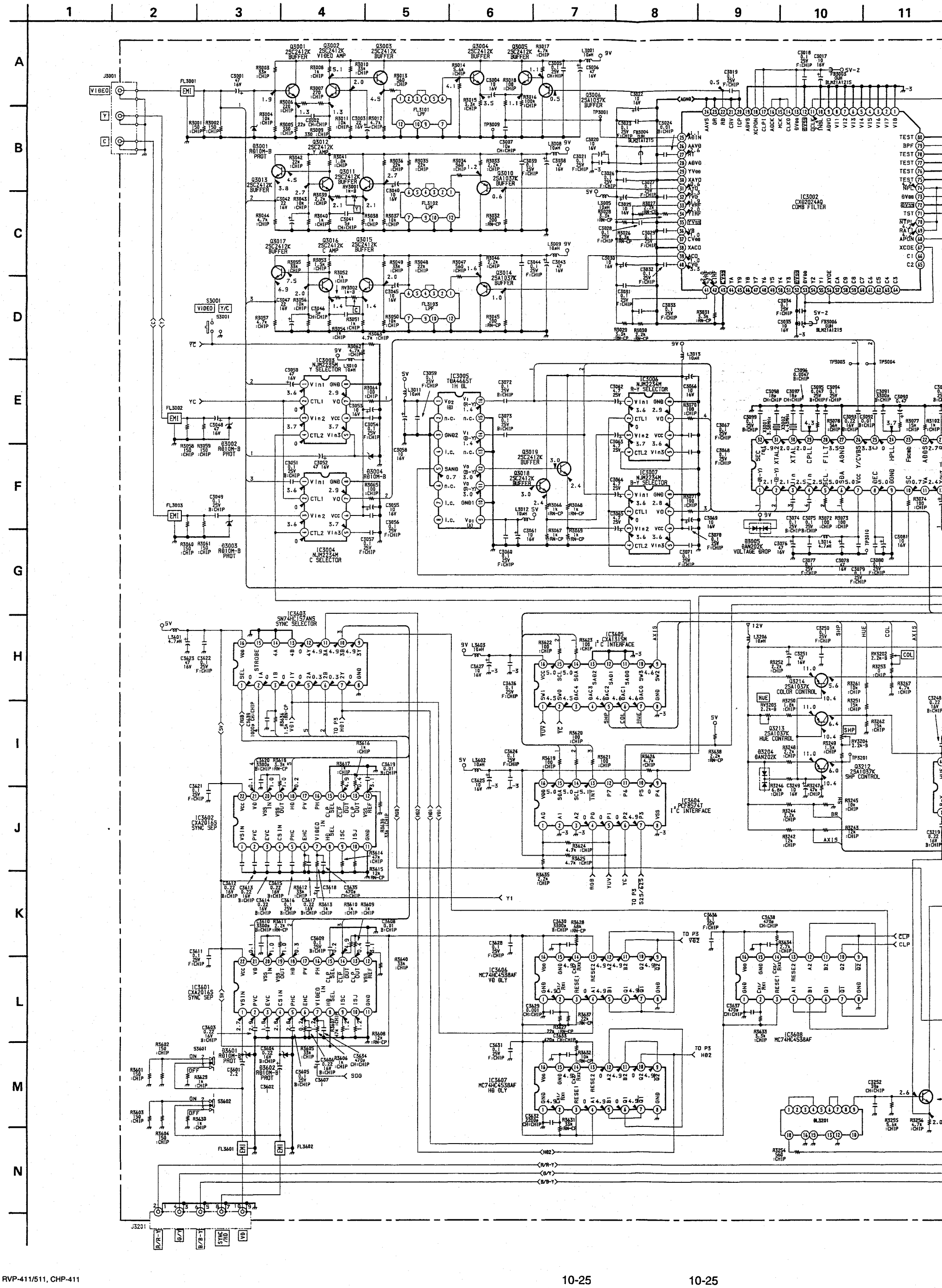



4
5
6
7
BA
SONY
1-666-013-12
A
DIP
CN3403
CN3402
IC3415
IC3401
J3201
J3001

BA -A SIDE-
1-666-013-12


7
6
5
4
3
2
1
A
B
C
D
E
F
G
B
1-666-013-12
BA
SONY
CN3401
CN3403
CN3402
IC3204
IC3425
IC3422
IC3412
J3001
J3201

BA -B SIDE-
1-666-013-12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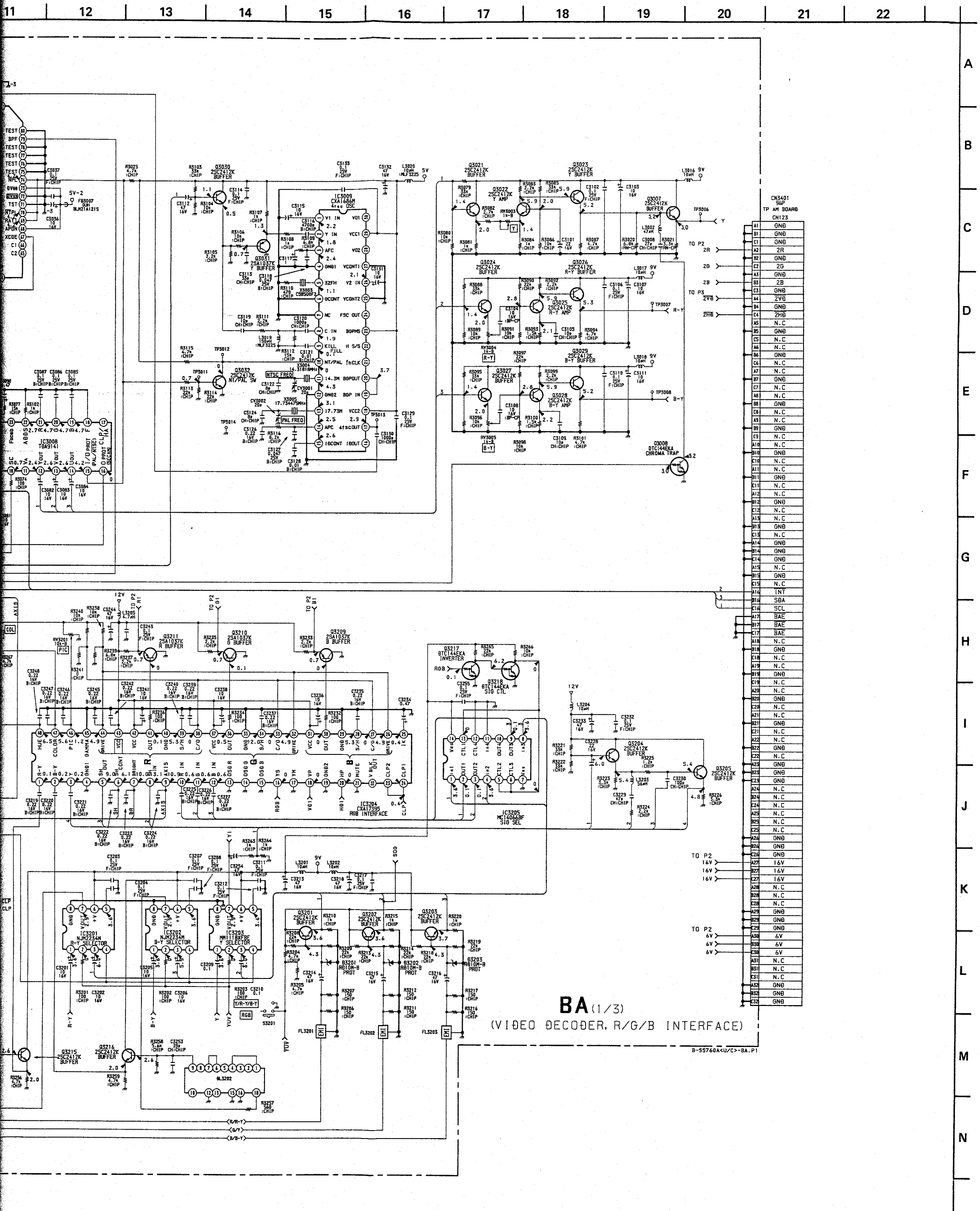
IC3003 NJM2234M Y SELECTOR
IC3004 NJM2234M C SELECTOR
IC3005 TDA4665T 1H DL
IC3006 NJM2234M R-Y SELECTOR
IC3007 NJM2234M B-Y SELECTOR
IC3601 CXA2016S SYNC SEP
IC3602 CXA2016S SYNC SEP
IC3603 SN74HC157ANS SYNC SELECTOR
IC3604 PCF8574T I²C INTERFACE
IC3605 CXA1315M I²C INTERFACE
IC3606 MC74HC4538AF VD DLY
IC3607 MC74HC4538AF HD DLY
IC3608 MC74HC4538AF
Q3001 2SC2412K BUFFER
Q3002 2SC2412K VIDEO AMP
Q3003 2SC2412K BUFFER
Q3004 2SC2412K BUFFER
Q3005 2SC2412K BUFFER
Q3006 2SA1037K BUFFER
Q3010 2SA1037K BUFFER
Q3011 2SC2412K BUFFER
Q3012 2SC2412K Y AMP
Q3013 2SC2412K BUFFER
Q3014 2SA1037K BUFFER
Q3015 2SC2412K BUFFER
Q3016 2SC2412K C AMP
Q3017 2SC2412K BUFFER
Q3018 2SC2412K BUFFER
Q3019 2SC2412K BUFFER
Q3212 2SA1037K SHP CONTROL
Q3213 2SA1037K HUE CONTROL
Q3214 2SA1037K COLOR CONTROL
D3005 DAN202K VOLTAGE DROP
J3001
J3201
S3001
S3601
S3602
VIDEO
Y/C
R/R-Y
G/Y
B/B-Y
SYNC HD
VD
1 2 3 4 5 6 7 8 9 10 11
A B C D E F G H I J K L M N


11
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21
22
A
B
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D
E
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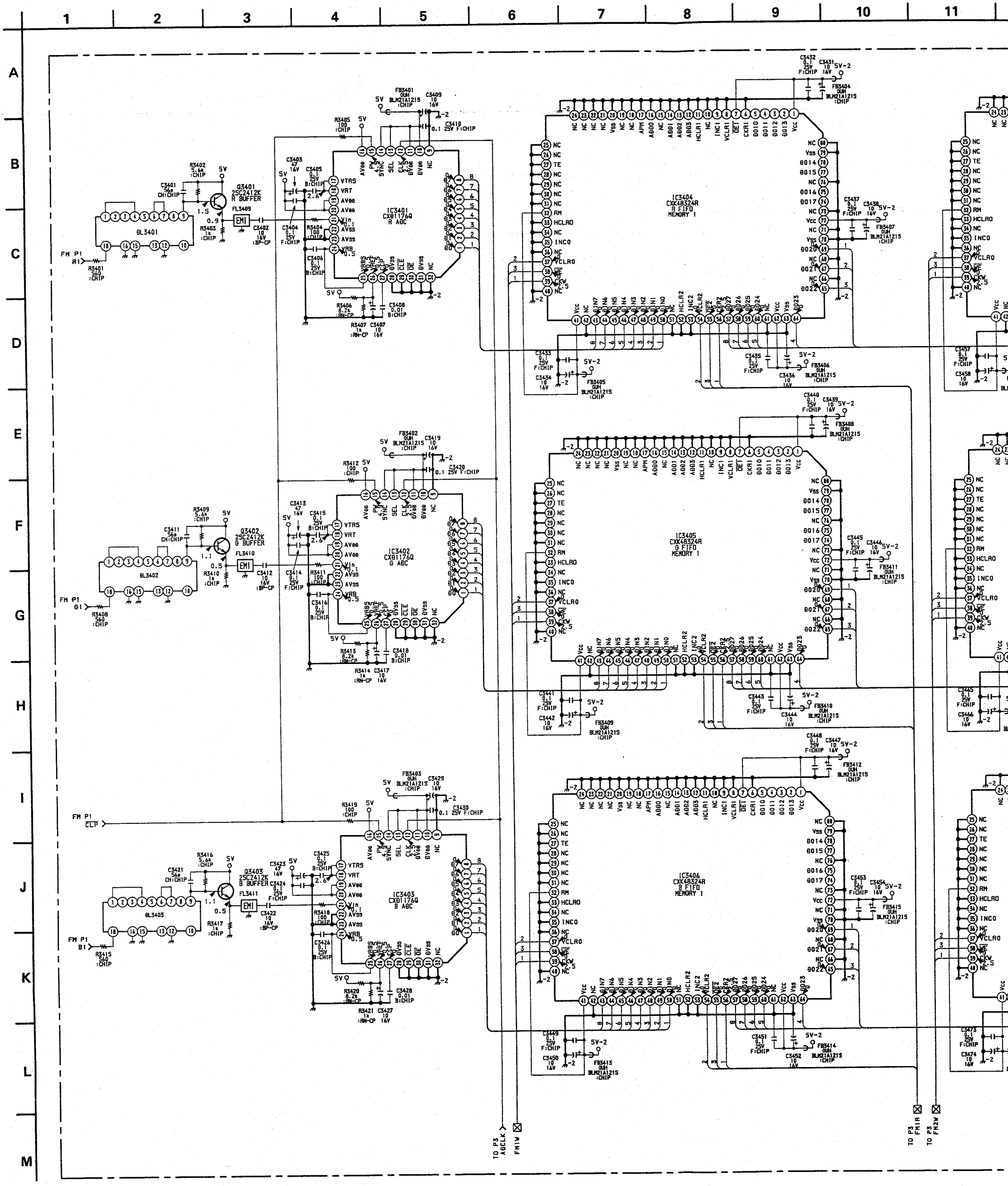
G
H
I
J
K
L
M
N
IC3009 CXA1686M 4fsc OSC
Q3030 2SC2412K BUFFER
Q3031 2SA1037K Y BUFFER
Q3032 2SC2412K NT/PAL SW
X3004 14.31818MHz
X3005 17.734475MHz
NTSC FREQ
PAL FREQ
IC3008 TBA9141
Q3021 2SC2412K BUFFER
Q3022 2SC2412K Y AMP
Q3023 2SC2412K Y BUFFER
Q3024 2SC2412K BUFFER
Q3025 2SC2412K R-Y AMP
Q3026 2SC2412K R-Y BUFFER
Q3027 2SC2412K BUFFER
Q3028 2SC2412K B-Y AMP
Q3029 2SC2412K B-Y BUFFER
Q3007 2SC2412K BUFFER
Q3008 DTC144EKA CHROMA TRAP
CN3401 96P TP AM BOARD CN123
TO P2
TO P3
Q3211 2SA1037K R BUFFER
Q3210 2SA1037K G BUFFER
Q3209 2SA1037K B BUFFER
IC3204 CXA1739S RGB INTERFACE
Q3217 DTC144EKA INVERTER
Q3218 DTC144EKA SIG CTL
IC3205 MC14066BF SIG SEL
Q3204 2SC2412K BUFFER
Q3205 2SC2412K BUFFER
IC3201 NJM2234M R-Y SELECTOR
IC3202 NJM2234M B-Y SELECTOR
IC3203 MM1118XFBE Y SELECTOR
Q3201 2SC2412K BUFFER
Q3202 2SC2412K BUFFER
Q3203 2SC2412K BUFFER
D3201 RB10M-B PROT
D3202 RB10M-B PROT
D3203 RB10M-B PROT
FL3201
FL3202
FL3203
Q3215 2SC2412K BUFFER
Q3216 2SC2412K BUFFER
DL3202
S3201
Y/R-Y/B-Y
RGB
B-SS760A<U/C>-BA.P1

BA(1/3)
(VIDEO DECODER, R/G/B INTERFACE)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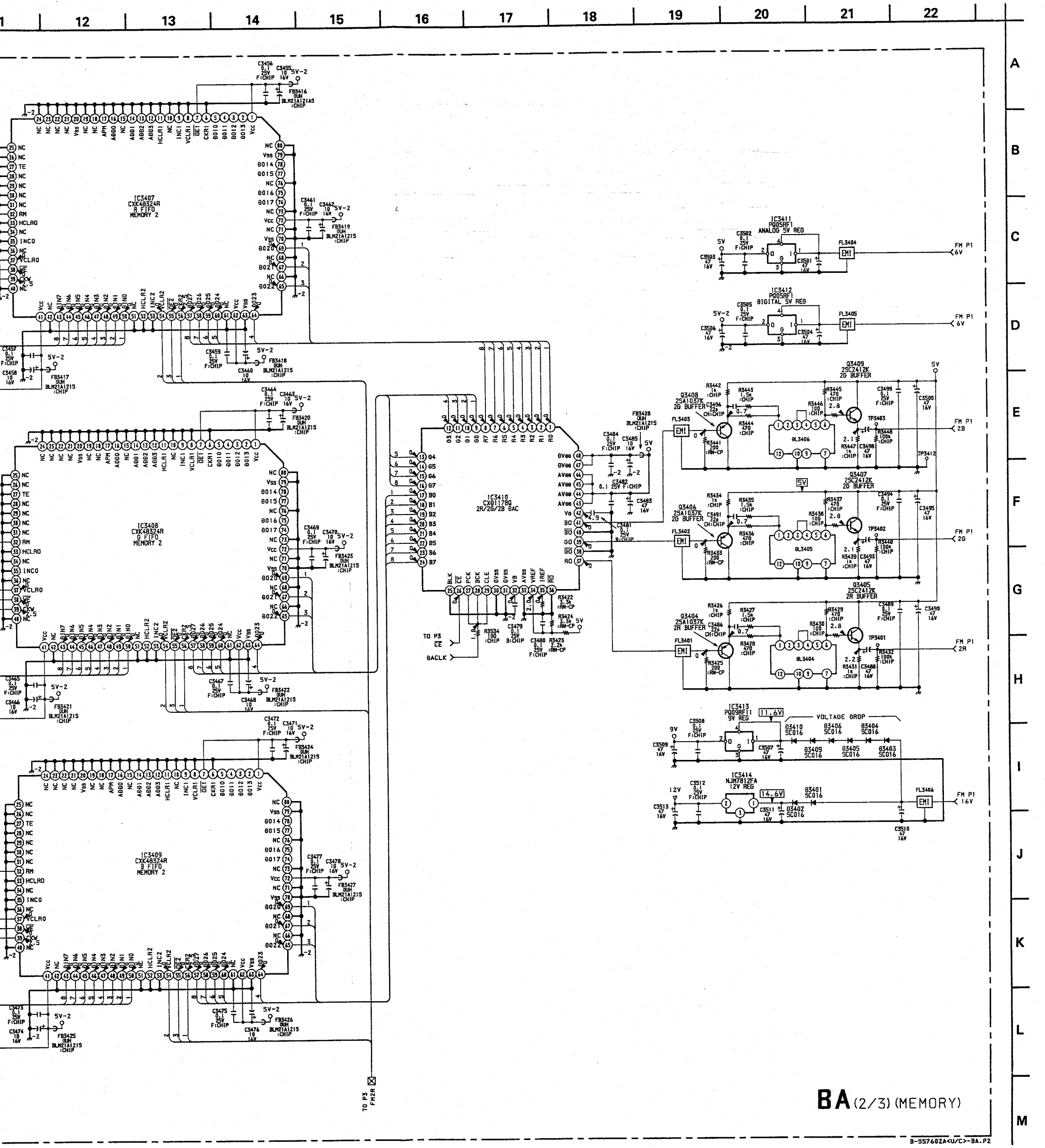
10
11
A
B
C
D
E
F
G
H
I
J
K
L
M
FM P1 R1
FM P1 G1
FM P1 B1
FM P1 CLP
BL3401
BL3402
BL3403
Q3401 2SC2412K R BUFFER
Q3402 2SC2412K G BUFFER
Q3403 2SC2412K B BUFFER
FL3409
FL3410
FL3411
EMI
IC3401 CXD1176Q R ADC
IC3402 CXD1176Q G ADC
IC3403 CXD1176Q B ADC
IC3404 CXK48324R R FIFO MEMORY 1
IC3405 CXK48324R G FIFO MEMORY 1
IC3406 CXK48324R B FIFO MEMORY 1
FB3401 0UH BLM21A121S :CHIP
FB3402 0UH BLM21A121S :CHIP
FB3403 0UH BLM21A121S :CHIP
5V
5V-2
TO P3 ADCLK
FM1W
TO P3 FM1R
TO P3 FM2W


IC3407
CXK48324R
R FIFO
MEMORY 2
IC3408
CXK48324R
G FIFO
MEMORY 2
IC3409
CXK48324R
B FIFO
MEMORY 2
IC3410
CX01178Q
2R/2G/2B DAC
IC3411
PQ05RF1
ANALOG 5V REG
IC3412
PQ05RF1
DIGITAL 5V REG
IC3413
PQ09RF11
9V REG
IC3414
NJM7812FA
12V REG
Q3409
2SC2412K
2G BUFFER
Q3408
2SA1037K
2G BUFFER
Q3407
2SC2412K
2G BUFFER
Q3406
2SA1037K
2G BUFFER
Q3405
2SC2412K
2R BUFFER
Q3404
2SA1037K
2R BUFFER
DL3406
DL3405
DL3404
VOLTAGE GROP
D3410 SC016
D3406 SC016
D3404 SC016
D3409 SC016
D3405 SC016
D3403 SC016
D3401 SC016
D3402 SC016
FL3401
FL3402
FL3403
FL3404
FL3405
FL3406
FM P1 6V
FM P1 6V
FM P1 2B
FM P1 2G
FM P1 2R
FM P1 16V
TO P3 CE
BACLK
TO P3 FM2R
5V
5V-2
9V
12V
11.6V
14.6V
A
B
C
D
E
F
G
H
I
J
K
L
M
12
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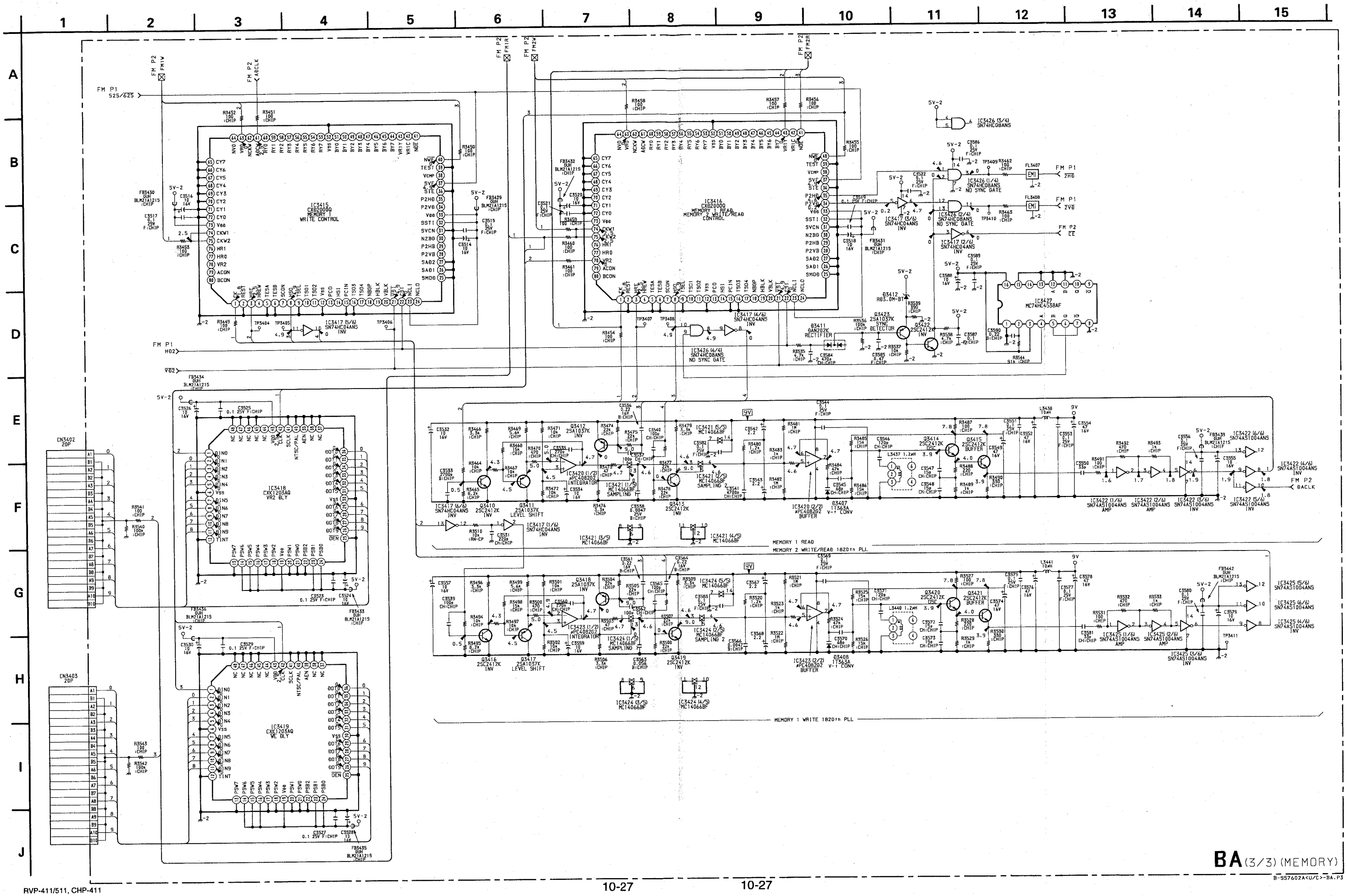
22

BA(2/3) (MEMORY)

B-SS7602A<U/C>-BA.P2


FM P2 FM1W
FM P2 ADCLK
FM P2 FM1R
FM P2 FM2W
FM P2 FM2R
FM P1 525/625
IC3415 CXD2000Q MEMORY 1 WRITE CONTROL
IC3416 CXD2000Q MEMORY 1 READ MEMORY 2 WRITE/READ CONTROL
IC3426 (3/4) SN74HC08ANS
IC3426 (1/4) SN74HC08ANS NO SYNC GATE
IC3426 (2/4) SN74HC08ANS NO SYNC GATE
IC3426 (4/4) SN74HC08ANS NO SYNC GATE
IC3417 (3/6) SN74HC04ANS INV
IC3417 (2/6) SN74HC04ANS INV
IC3417 (5/6) SN74HC04ANS INV
IC3417 (4/6) SN74HC04ANS INV
IC3417 (6/6) SN74HC04ANS INV
IC3417 (1/6) SN74HC04ANS INV
IC3427 MC74HC4538AF
Q3411 DAN202K RECTIFIER
Q3412 RD3.0M-B1
Q3423 2SA1037K SYNC DETECTOR
Q3422 2SC2412K
FM P1 2HD
FM P1 2VD
FM P2 CE
FM P1 HD2
VD2
FM P2 BACLK
CN3402 20P
CN3403 20P
IC3418 CXK1203AQ VR2 BLY
IC3419 CXK1203AQ WE BLY
Q3410 2SC2412K INV
Q3411 2SA1037K LEVEL SHIFT
Q3412 2SA1037K INV
IC3420 (1/2) μPC4082G2 INTEGRATOR
IC3421 (1/5) MC14066BF SAMPLING
IC3421 (5/5) MC14066BF
IC3421 (2/5) MC14066BF SAMPLING 2
IC3421 (3/5) MC14066BF
IC3421 (4/5) MC14066BF
Q3413 2SC2412K INV
IC3420 (2/2) μPC4082G2 BUFFER
Q3407 1T363A V-I CONV
Q3414 2SC2412K OSC
Q3415 2SC2412K BUFFER
IC3422 (1/6) SN74AS1004ANS AMP
IC3422 (2/6) SN74AS1004ANS AMP
IC3422 (3/6) SN74AS1004ANS INV
IC3422 (4/6) SN74AS1004ANS INV
IC3422 (5/6) SN74AS1004ANS INV
MEMORY 1 READ
MEMORY 2 WRITE/READ 1820fh PLL
Q3416 2SC2412K INV
Q3417 2SA1037K LEVEL SHIFT
Q3418 2SA1037K INV
IC3423 (1/2) μPC4082G2 INTEGRATOR
IC3424 (1/5) MC14066BF SAMPLING
IC3424 (5/5) MC14066BF
IC3424 (2/5) MC14066BF SAMPLING 2
IC3424 (3/5) MC14066BF
IC3424 (4/5) MC14066BF
Q3419 2SC2412K INV
IC3423 (2/2) μPC4082G2 BUFFER
Q3408 1T363A V-I CONV
Q3420 2SC2412K OSC
Q3421 2SC2412K BUFFER
IC3425 (1/6) SN74AS1004ANS AMP
IC3425 (2/6) SN74AS1004ANS AMP
IC3425 (3/6) SN74AS1004ANS INV
IC3425 (4/6) SN74AS1004ANS INV
IC3425 (5/6) SN74AS1004ANS INV
IC3425 (6/6) SN74AS1004ANS INV
MEMORY 1 WRITE 1820fh PLL
L3437 1.2μH
L3440 1.2μH
L3438 10μH
L3441 10μH
5V-2
9V
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
A
B
C
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E
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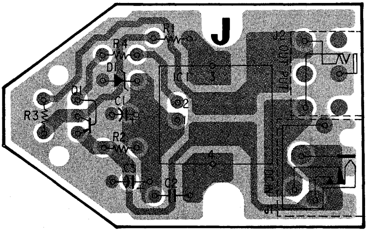
G
H
I
J

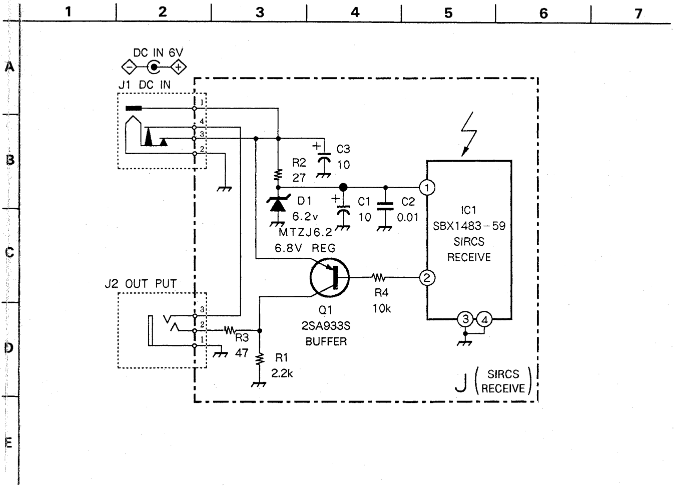
BA(3/3) (MEMORY)

B-SS7602A<U/C>-BA.P3

RM-PJ10


J
R1
R4
D1
IC1
Q1
C1
C2
R3
R2
C3
C2
3
4
J2 OUT PUT
DC IN
J1

J -B SIDE-


1
2
3
4
5
6
7
A
B
C
D
E
DC IN 6V
J1 DC IN
C3
10
R2
27
D1
6.2v
MTZJ6.2
6.8V REG
C1
10
C2
0.01
IC1
SBX1483-59
SIRCS
RECEIVE
J2 OUT PUT
R4
10k
Q1
2SA933S
BUFFER
R3
47
R1
2.2k
J (SIRCS RECEIVE)